

Childhood Education

What Are

Levels?

How should we look at them?

December 1955

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CONSTANCE CARR, *Editor*
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Photo by Eva Luoma

There is the gift of courtesy, often concealed in clumsy actions;
 a gift of reticence when speech might hurt;
 a gift of withdrawal while the acquisitive are pushing into front place;
 a gift of dispassionate conclusions in the midst of partisan heat;
 a gift for the understanding of children.

There is a gift of the quiet word that calms the anxious heartbeat;
 a gift of social grace that stoops to make life bearable for the awkward.

For us as well as for the young, there is the gift of living together,
 lost so often in the attachment to worthless personal possessions.

—Hughes Mearns

What Are Levels?

IT IS QUITE NATURAL THAT THE MAGAZINE FOR THOSE CONCERNED with children should be interested in levels. Carpenters, geologists, surveyors, engineers, chemists, cooks are interested in levels in one form or another. Why should not teachers and child psychologists make judicious use of the concept of levels?

In the fields of childhood education and child development, levels have to do with relativities rather than with absolutes. A level does not denote a plateau. It denotes a stage of maturity and of accomplishment in a growing, achieving organism. The organism, of course, is the child in home, school, and community.

It takes time to grow. We express the amount of time consumed by age. For this reason levels and stages and ages are inextricably interlinked. The growth process manifests itself in three major signs and symptoms: anatomical, physiological, behavioral. Behavior signs are the most comprehensive indicators of maturity status. And these are the very signs which the teacher observes. He is interested in levels because he is concerned with the behavior values of age and the age values of behavior. He is interested in the underlying gradients of growth. A growth gradient is the series of stages or degrees of maturity by which a child progresses toward a higher level of functioning.

There is no thermometer which may be placed in the mouth to register degrees of maturity. There are various methods for defining and measuring general and specific abilities. But in final analysis scores and quotients may require an evaluation of the basic maturity traits of the individual child. Each child has a unique pattern of growth which is the key to his individuality. The concept of levels invites one to look for that key in the individual's ways of growth.

In this sense the idea of levels is philosophic; it encourages a deeper recognition of individual differences—their nature and origin. So if little Billy can't yet read, perhaps we ought to look at his levels! What are his levels and patterns of functioning: his body posture, eye-hand coordination, visual behavior, auditory perceptiveness, comprehension, motivation, emotional attitudes?

THE FORM AND FACILITY OF EARLY READING ARE PRIMARILY GOVERNED by inherent maturity factors and developmental readiness. Individual differences must be expected on various accounts. Awkward readers do not readily achieve flow in reading. They may simply perceive the beginning letters and the beginning words. If, however, a child of 7 or 8 exhibits the reading patterns fully characteristic of 6, he is probably on his way toward higher achievement in the following years. We do injustice to some children by overlooking individual differences. We tend to stress reading too much, too early, and too strenuously—if we disregard levels.—ARNOLD GESELL, M.D., *research consultant, Gesell Institute of Child Development, New Haven, Conn.*

How should we look at levels—

from Child Growth and Development

Working with the wide range of individual differences within a group of children causes us to raise questions about the grouping. What do we know about how children grow and learn? Warren A. Ketcham is coordinator of psychological services in the University School, University of Michigan, Ann Arbor.

MANY CLASSROOM TEACHERS ARE BAF-
fled by the difficulties they encounter in
grouping pupils. Some of them have
sought to minimize their difficulties by
passing all pupils. This policy may
work smoothly for a time but eventually
it becomes a source of friction with
teachers of higher grades who object to
accepting children who have not met the
requirements for promotion. They con-
tend that automatic promotions lower
standards and make teaching more diffi-
cult by increasing individual differences.

There are other teachers who con-
tinue the search for more perfect plans
for grouping pupils. The following state-
ment of a first-grade teacher is typical:
"I am expected to teach all my children
to read before I pass them to the second
grade. Consequently, teaching the slow
group is often an unpleasant experience,
for both myself and the children. Our
efforts are so futile and they know it as
well as I do." This teacher was a mem-
ber of a committee which was considering
the possibility of establishing an addi-
tional level between kindergarten and
first grade for slow growing and intel-
lectually less capable children. The com-
mittee was in search of data on the use of
the plan in other school systems.

The addition of an intermediate level
between kindergarten and first grade is

one of many widely used variations of
the traditional age-grade plan for group-
ing pupils. Data on most of the vari-
ations are available in sufficient quantity
to support the general conclusion that
none of them affect the ultimate academic
achievement of children.

The prevailing concern of teachers
about grouping policies reminds us of
the search for the proverbial "pot of
gold." There is literally no end to the
extent to which pupils are juggled and
shuffled in an effort to achieve the
impossible purposes of homogeneous
groups, minimum essentials, and con-
tinuous improvement. In all of this the
teacher suffers most because problems
do not vanish—they merely change their
major point of origin from pupil to col-
league to parent.

Teachers will do better to stop debating
the relative merits of various systematic
plans which propose to fit groups of chil-
dren to prescribed curricula. They will
then be free to concern themselves with
a real and ever-present purpose for
grouping—the provision of a secure and
orderly progress through school for chil-
dren who must grow as individuals but
must be taught in groups. In so doing
teachers will find it profitable to make
more generous use of data and concepts
from child growth and development.

Help for Teachers

At an early age children show characteristic differences in rate of growth. In general, rapid growers not only show greater size, ability, and skill than is typical for their age but they also attain more of the same in less time than do slow growers. Children's growth rates are individual to the extent that there are as many different rates as there are children in a class group. In approximately eight out of ten cases a child's total growth, all his measurable attributes, progresses according to his characteristic rate. The child grows "as a whole" and at his own rate.

Many persons, who easily accept the fact that children are different, may be completely unaware that growth, in and of itself, constantly makes children of a given age more and more different as they grow older. For example, as the present seventh grade in the University School, University of Michigan, progressed from grade one through grade six the difference between the poorest and the best reader increased approximately 14 times. During the same period all children learned to read. According to test results from a nearby public school system, individual differences in academic achievement among seventh graders are roughly double the differences among fourth graders.

In addition to a characteristic growth rate, each child shows periodic changes in rate which form an equally characteristic growth pattern. For any given period of time both slow growers and rapid growers may show an increase or a decrease in their total growth rate. These periods of increase and decrease are commonly known respectively as spurts and plateaus. This phenomenon has a tendency to modify what might otherwise make for extreme and divisive differences between children of a given age

since a typical slow grower during a spurt may grow more rapidly than a typical rapid grower who is on a plateau. During the same period any two children may continue to function on quite different levels of complexity.

The preceding delineation of a number of major findings from child growth and development has led to several broad generalizations which are potentially useful for grouping children:

- Various dimensions of size, behavior, ability, and achievement tend to grow at a common and characteristic rate within each child, thus maintaining a relative degree of predictability and unity of growth.
- Variations in rate of growth are a major source of differences between children.
- Differences between children of the same age increase rapidly as the children grow older.
- Each child's rate of growth varies periodically to produce an individual growth pattern.

The inspection of the longitudinal record of a particular child whose growth temporarily contradicts some of these generalizations serves to further emphasize the complexity and individuality of growth. The growth record which is graphically illustrated in Figure 1 has been selected by reason of the child's delay in start of academic achievement which would have brought the appropriateness of his grade placement and promotion into question in many school systems. The graph gives various measurements and test scores which have been converted into units of months of growth age on the vertical axis and chronological age on the base line. The straight diagonal line indicates average growth. The heavy line running across the graph at 84 months is used to define the beginning of educational growth in terms of the ability to attain 84 months of achievement age on a standardized achievement test.

All types of growth have a beginning. Data from child growth and development show that the beginnings of relatively simpler skills generally precede the beginnings of more complex ones.

Complex skills not only appear later but they show wider variation in the age at which they begin for different children. The language skills provide an excellent example. In general children talk earlier than they read. The beginning of true speech varies among children from ages 1 to 3 years while the beginning of reading varies from ages 4 to 12 years.

Growth in educational age for the boy in Figure 1 did not begin until age 9 years regardless of many opportunities in an excellent school situation. Many children with less physical, mental, and social resources begin their educational growth much earlier. Subsequent rapid growth with the continuation of adequate opportunities for growing indicate that this child's late start was normal for him.

The constant and orderly increase of skills and knowledge is widely discussed as a worthy purpose of teaching. It is not well supported by the longitudinal growth data of individual children. Most types of growth show intermittent periods of gain, loss, or absence of change. For example, the child in Figure 1 showed no change in reading age between ages 120 and 126 months, a gain of 28 months between ages 126 and 132 months, and a loss of 5 months between ages 132 and 138 months.

These variations in the progress of a specific type of growth are somewhat different from the spurts and plateaus in total growth which were mentioned earlier. The possibility of loss as a normal but temporary aspect of a specific type of growth must be acknowledged. Losses in educational growth for which teachers frequently feel responsible are rarely the

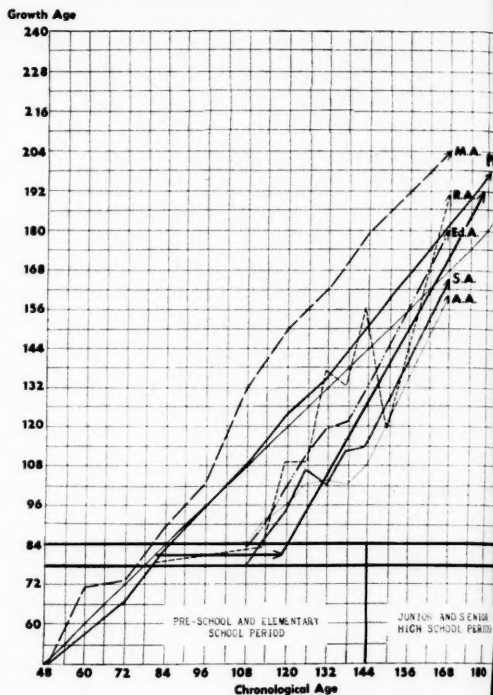


FIGURE 1

consequence of teaching. It should be noted that the discontinuous growth curves in Figure 1 generally and ultimately represent rapid and superior educational growth beyond the point of start.

Lateness of start and discontinuities in progress frequently create disturbing discrepancies in the growth of particular children. Returning again to Figure 1, it is easily apparent that at age 132 months his educational age (an average of all achievement ages) was still 120 months. At the same time his mental age was 162 months and his physical age was approximately 135 months.

Records of the behavioral adjustment of children, who show discrepancies in growth of this magnitude, indicate that their "design for growing" frequently makes it difficult for them to achieve the

promise of their physical and mental resources.

To the student of child growth and development some of the purposes of systematic plans for grouping pupils are possible to a limited extent but not worth the effort. Other purposes are simply impossible. Manipulating groups of children to fit a prescribed curriculum is a poor substitute for the teacher's efforts to provide learning experiences which are adaptable to the complex, individual, and variable, yet ultimately predictable phenomenon which human growth is.

The grouping policy which follows is incomplete and suggestive. It should be modified by a school staff in terms of its present readiness to accept what we now know about the growth and development of children and it should be subject to further modification by a staff as new knowledge becomes available and is accepted as a basis for practices.

Policy Based on What We Know

1. Since chronological age is the only common predictable characteristic about a given group of children and since it is the basis on which they are admitted to school, it is the best basis for grouping *most* children.

2. Various forms of temporary intra-class and inter-class grouping based on the interests, activities, and special abilities of children are encouraged as an excellent means of providing flexibility in the school program.

3. The idea that all children *must* be promoted automatically, regardless of actual growth, is rejected.

4. The idea that some children are to be retained at grade on the basis of their delay in meeting standards related to any specific type of growth is rejected.

5. When a child is considered for placement in another group which is older or younger than is typical for his age, his total growth is considered. Total growth includes all available data on physical, emotional, social, mental, and educational growth.

6. When a child is considered for place-

ment in another group all persons who would be affected by the change are involved in making the decision. All persons would usually include parents, teacher, principal, and the child himself. The visiting teacher, school psychologist, or school nurse are very helpful when they are available.

7. The presence of a brother or sister in the next older or younger group is taken into account in any plans for regrouping a child.

8. The purpose of grouping is to help each pupil find a school situation which is best suited to his total growth. Data from child growth and development present strong evidence that children grow best and most comfortably with their own age group. Exceptions may arise when a child's extremely slow or rapid growth isolates him outside the range of individual differences of a group. Since this circumstance of isolation occurs an equal number of times for slow growers and rapid growers, it should follow that a school staff will not find it necessary or wise to retain pupils more often than they accelerate pupils.

A grouping policy based on the growth and development of children will not eliminate grouping problems. It will help teachers in their efforts to assure all pupils normal and maximum growth toward variability, happiness, and productivity.

In summary, the basic issue at stake in any controversy over grouping practices is growth for variability versus education for uniformity. The sharpness of the issue is increasing in many school communities among both teachers and laymen. The student of child growth and development rests his case on the knowledge that, regardless of the expectations of society regarding the results of schooling or the convictions of teachers and parents regarding the effects of instruction, schools will find it increasingly difficult to continue the practice of grouping plans which deny or ignore what we now know about the way children grow and develop.

How should we look at levels—

from Democratic Practices

Our democratic world requires thinking, responsible, trustworthy people, adequate to deal effectively with themselves and others. How do levels affect our value systems? Arthur W. Combs is professor of education, University of Florida, Gainesville.

WE LIVE IN THE MOST COOPERATIVE, interdependent society the world has ever known. The Earth has become a very small place in which we live, almost literally, in each other's laps. Few of us could remain alive for more than a few days if we were faced with the necessity of relying entirely upon ourselves. We are inescapably dependent upon the good will and cooperation of millions of other people. Never before has it been so true that we are "our brother's keeper." In our kind of world, learning to live with other people is not just a nice ideal; it is a hardheaded, practical necessity.

In addition to making us almost totally dependent upon each other, the physical sciences have so vastly increased the power in the hands of the average man that even the humblest of us has vast potentialities for good or evil. We have hundreds of kilowatts at our disposal at the nearest light switch. We can buy all kinds of tools for life or death at the corner store. Anyone who drives a car has several hundred horsepower and a ton of metal at his finger tips which can be used as an engine of life or death on the highway. We would not dare to drive if we could not count on other people to stay on their side of the road. Thousands of people whom we have never

met hold our welfare in their hands. *In the world we live in, there are no longer any unimportant people!*

Our democratic world requires thinking, responsible, trustworthy people, adequate to deal effectively with themselves and others. We are too interdependent to settle for anything less. Adequate people are the foundation of democracy, and our schools must turn out ever larger numbers of such personalities. Discouraged, frustrated, unhappy people who see themselves as unliked, unwanted, unacceptable, or unable are an ever-present danger to the rest of us. People who see themselves as inadequate behave inadequately. The realization of the democratic-Christian ideal is possible only in direct measure as we are able to produce effective, adequate people who can be counted upon to assume both the privileges and responsibilities of citizenry with dignity and integrity.

We Are Taught Who We Are

People behave or misbehave, we know, depending upon how they see themselves in the world in which they live. Each of us behaves in terms of his own self concepts. The production of adequate self concepts is the primary business of our public schools. People need to know about subject matter, of course, but the

effect of this understanding may count for nothing if the individual who *knows what to do* cannot be counted upon to do it. Teachers teach more than subject matter. Whether they are aware of it or not, they build people's concepts of themselves. People do not get the ways they see themselves out of the blue. They discover who they are and what they are from the ways they are treated by those who surround them in the process of their growing up. We are *taught* who we are.

The levels and labels we attach to children in their most formative years teach children who they are and what they are, even more surely than the talks we give, the sermons we preach, or the books they read. Children acquire their self concepts from experience. The values placed upon children by the adults they live and work with have inevitable effects upon developing self definitions. We teach children that they are liked or unliked, able or unable, acceptable or unacceptable by the ways we behave with respect to them. In recent years we have even discovered that children's abilities in the basic skills of reading and spelling are remarkably sensitive to what they *believe* they can do. Most children brought to reading clinics, for example, have nothing wrong with their eyes. They cannot read or spell because they *believe* they cannot! Children who believe they "can't read very well," *don't* read very well and avoid opportunities to practice. Other people observing that such a child does not read well say, "My goodness, Jimmy, you don't read very well!" a sentiment which corroborates what Jimmy already believes! He is not surprised, either, when he takes home a report card with a failing grade; it proves what he already thinks! The "levels" we define in classifying and working with children have inevitable effects upon chil-

dren's beliefs about themselves and their abilities.

Human Abilities Are Not Static

We no longer believe that human abilities are static, unchanging characteristics inherited from our ancestors and never after open to modification. Modern psychology tells us that intelligence and abilities generally are not so fixed and immutable as we once thought. Within certain limits the capacity to behave effectively and efficiently may vary far more than we once believed. If human abilities are native and unchangeable, the classification of children by levels makes sense. It would seem, that in the light of our newer understandings, emphasis upon levels may serve to restrict whatever degrees of latitude a child possesses. The concept of assigning children to levels seems fundamentally inconsistent with a view of human abilities that permits any degree of latitude.

The surest thing we know about people is the fact of their infinite variability. In the light of this knowledge it is a shocking thing to me that there is so little variability in children's grades throughout the school years. From grades one through twelve, one can often find little or no variation in a child's achievement. It is as though the child learned early the level at which he was expected to produce and thereafter lived up to his quota! People can be made prisoners of their own misperceptions even more surely than clapping them in jail. Prisoners in jail know there is a better life outside and seek to escape from their confinement, but the victim of his own perceptions does not know he is a prisoner. He accepts his perceptions as valid definitions of himself and the world he lives in. Any kind of bars around people, whether composed of iron or of false beliefs, are a drag upon the productivity

and efficiency of the individual and a consequent hindrance to the effective operation of a free society.

To Each in Terms of His Needs

The democratic ideal of "to each in terms of his needs" has been effectively translated in modern education into the principle of "pacing" materials to the level of a child's growth and development. It represents an attempt to achieve a working adjustment between the goals of education and the current needs, achievement, and abilities of the student. It is a continuously developing, shifting, changing program suited to the peculiar needs of a particular individual. The danger lies in the crystallization of these fluid conditions into "levels"; descriptions of potential or status conceived, not as shifting and changing relationships, but as static, concrete definitions of capacity or intelligence. *The adjustment of tasks to the developmental achievement of the child is one thing; the classification of children into levels of ability is quite a different matter.* One encourages the continual testing of personal limits; the other imposes self definitions which discourage self exploration and discovery.

The classification of children into levels is often justified as a "democratic procedure." It is argued that in our society people live and work on widely varying levels, and children "might as well get accustomed to this sort of thing early." The fact that people live and work on varying levels as adults does not mean these levels should be imposed on children. The early indoctrination of levels is more characteristic of a caste system than a democracy. Democracy needs flexible, independent, thinking people. The task of the school is not to define children's levels, but to help children find what is the best they can be.

Too early, too rigid definitions of self may impede this goal. Education must keep personalities open to experience as long as possible. The task of the schools is not to teach a child what he is, but to help him discover and achieve the *best he can become*.

Categorizing people is, after all, a matter of convenience for the teacher or administrator. It is a device to make it easier to deal with large numbers of children. We need to remind ourselves, however, that such distinctions are not real. Children left to themselves would be unlikely to develop such stereotypes. There is nothing wrong with doing something because it is convenient. *The problem arises when we begin to attach false values to the things we do for convenience or attempt to justify them on the basis of loftier motives than honest evaluation would support.*

To Value Integrity and Dignity

We have inherited a hierarchy of values about people from an earlier generation. Many of us still look down upon the garbage man, the plumber, or the farmer while exalting the white collar worker and business executive. Yet, the fact of the matter is we could get along much better, if we need to, without the white collar worker than we could without the farmer or garbage man. We sometimes enjoy the superiority with which we can complain about the man in the street and his ignorance of intellectual matters. The machinist who is an artist with his lathe, who can turn out tools and dies with tolerances no more than thousandths of an inch, we disdain because he is uninformed about the details of international affairs. At the same time we praise our diplomats for their special knowledge and contribution but never ask them to understand the job of the machinist. This, in spite of the fact that

the machinists of our society are more important to the everyday comfort of our daily life than the work of most diplomats, and this in no way disparages the importance of our foreign affairs experts. There can be no unimportant people in a democracy.

Many of us have not yet comprehended the full meaning of the dignity and integrity of man we have achieved in our society. As the Supreme Court has so forcefully pointed out to us in its action on segregation, the dignity and integrity of man is no longer an ideal to strive for in the dim and distant future; it is a necessary condition of a workable democracy.

A society fully valuing the dignity and integrity of people stresses the uniqueness of people as well as their likeness. It requires adequate, thinking, responsible people, living and producing at the maximum of their capacities. Rigid, narrow, unproductive people are a drag and a hindrance upon everyone else. We cannot afford to imprison people in distorted perceptions of themselves and their capacities. This is a problem of how people see themselves, a function in which the schools must play a major role. People who believe they are second-class citizens are likely to behave so. An educational program which teaches people false and inaccurate concepts of self is failing in its responsibility to the social order which gave it being. People cannot feel liked, wanted, acceptable, able, or worthy unless they are treated as though they were.

Children Learn about Themselves

Children need help in developing self concepts. They need experiences which help them to see themselves accurately and realistically, which help them evalu-

ate the progress they have made and the place where they currently stand. Like taking a trip on the railroad, observing the names of the stations as they are passed helps one to know how he is progressing along the way. It is when the grownups who surround children begin to confuse the assessment of status with capacity that the danger of levels occurs. When this happens, the child does not say, "This is *where* I am. I still have there to go." Instead, he says, "This is *what* I am. There's no place else to go!" The evaluation of current status is no longer a station marking one's progress on the railroad, but a place to get off and live the rest of one's life!

One of the great tragedies of our time is the millions of people in our society who are the unfortunate victims of their own misperceptions. Believing themselves to be limited, they behave in limited ways. Limited people hinder the fulfillment of the democratic ideal. We need to recognize the school's responsibility in the formulation of self definitions and to look with care at our practices, for children learn about themselves from what we do, including the things we do for our own convenience. Helping people to evaluate themselves is a healthy, effective means to produce accurate, positive, open self concepts. Imposing other people's values is quite another matter. Whether the things we do in evaluation and classification help children discover themselves as adequate, able people of dignity and integrity will not depend upon how the things we do seem to us teachers, but how these practices seem to the child himself. It will be necessary for us to learn to see as children see lest we run the risk of depending on practices that teach children *what they are* rather than help them become what they can.

How should we look at levels—

from the Psychology of Learning

Some of the principles of learning belie traditional practices in maintaining levels within the school. This concise statement should stir thinking and lead to improved practices. Mary Beauchamp is assistant professor of education, Center for Human Relations Studies, New York University, New York City.

"Matt is not reading up to grade level."
"Barbara is not working up to normal capacity."
"Pete is too immature for this grade."

We have yet to find a teacher who can relate the meaning of these oft-used clichés to what happens when a child learns. A dismaying proportion of school practice rests upon the premises that child growth and development can be standardized, that learning takes place *alike* in all children, that chronological age and grade level are valid concrete-nesses. These premises have been nullified by what we know about child growth and development and about how learning occurs. The only concept of levels that can be justified is that of the individual's recognition of his own levels of understanding, responses, insights, and comprehensions.

We shall attempt to state five principles of learning that belie the traditional levels concept in education, to identify briefly a few practices that urgently need examination, and to suggest some beacons of hope for the schools of the immediate future.

Principles of Learning

At least five important principles of learning, widely accepted in educational psychology, urge us to reconsider our practices in regard to levels.

- *The child learns with his whole body and the process cannot be reduced to an aggregation of parts.* Kurt Lewin established that the child thinks with his whole body. His early experimentation, so ably validated by Arnold Gesell's work, depicts the whole organism responding with acceptance or rejection. James Harvey Robinson states this principle thus: "But no such mind, exempt from bodily processes, animal impulses, savage traditions, infantile impressions, conventional reactions, and traditional knowledge, ever existed."¹ Physiological differences—especially reaction time; temperament; stamina; reservoir, release, and control of energy—affect integrally the quality of learning.

The following authors have reported most forcibly the significance of physiological differences and the wide range of differences at any one age:

- Boole, Mary E. *The Preparation of the Child for Science*. Oxford, England: Clarendon Press, 1904.
Child, C. M. *Physiological Foundations of Behavior*. New York: Henry Holt and Co., 1924.
Coghill, G. E. *Anatomy and the Problem of Behavior*. Cambridge, England: Cambridge University Press, 1929.
Ogden, R. M. "The Education of the Whole Child." *Educational Trends*, April-May, 1938, issue.
Olson, Willard C. *Child Development*. Boston: D. C. Heath and Company, 1949.
Prescott, Daniel. *Emotion and the Educative Process*. Washington, D.C.: American Council on Education, 1938.

¹ James Harvey Robinson, *Mind in the Making*. New York: Harper and Brothers, 1950. p. 33.



The child learns with his whole body
and the process cannot be reduced
to an aggregation of parts.

Photo by Margaret Adams, Great Neck, N. Y.

Psychological differences are so intimately related to the physiological that as yet our efforts to analyze them separately have yielded us little. The experimentation being pursued in the area of perception has raised tremendously significant questions about what we once assumed was the commonality of our psychological worlds.

We are admonished today by pioneer thinkers to keep the parts wholly related to and integrated with the whole. The human being is more than a bundle of cells, neurons, a mass of systems—he is a unique individuality, an integrated personality. He is process. This process of learning with the whole body demands that levels, as they have been applied to

standardized procedures, be scuttled for recognition of the concept of individual differences.

• *The whole organism must reach a stage of maturity before learning can be integrative.* This is the second principle of learning belying levels. This stage cannot be hurried without serious damage to the total personality. Cobb¹ has attributed the high percent of insanity to getting abstract concepts in the cortex before their meaning has been taken in by the whole body. Thus when a child is ready to read, he reads, if he is among people who read. When he is ready to feed himself with a spoon, he picks up the spoon and begins stuffing the food in. Practice *after* the stage of maturity is reached improves the function. Practice *before* retards growth in the function and usually damages personality. The best cue to a stage of readiness is interest. The child tells us what he is ready for. We don't tell him—but we do if our emphasis is on a reading readiness program, if we require workbooks in kindergarten, or memorization of the nines in grade three.

• *Learning is largely a process of acculturation and takes place on an unconscious (unaware) level.* One's language, ways of moving, gestures, habits, manners, and ways of relating are a result of his unique interaction with other human beings. Even if we could standardize human beings, we should still have to standardize culture if we were to pay homage to grade levels. Plant says: "It is disturbing to realize how little the schools recognize that their twelve grades should be one, single, meaningful process."² Boole wisely stated: "The process should always be learned through experience unconsciously, the principle involved coming to consciousness later." Experi-

ence, so diverse in a democratic culture, is crucial in enriching the learning that takes place unconsciously. The teacher's role is to contrive deep and broad enriching experiences—to which individuals may relate as their own uniquenesses dictate.

• *The distinctively human levels of learning—comprehensions, understandings, and insights—derive their quality from the meaningfulness of learning at lower levels.* If organismic learning (described by "growth, differentiation, and performance of the manifold local functions") or neurological learning (described by functioning of reflexes, conditioning, adaptive adjustments, mass movements of the body as a whole) are faulty the quality of the human levels will be inferior. The interdependence of all levels of learning demands attention to the uniqueness of one's growth pattern. A human being can "respond to more kinds and gradations of environmental changes and with responses which are more rapid, more complex, more variable, more integrated, and finally more adaptive."³ This is true only if the uniqueness of the individual is respected and held inviolate.

Each must do his own learning. This fifth principle of learning requires serious attention. Learning cannot be coerced. The teacher may assign, may motivate, may demand. But the child learns only what he chooses to learn. If we are to succeed in teaching higher levels of aspiring, of valuing, of sharing and of communicating, we must take the trouble to recognize what Allport⁴ calls the lifestyle of the individual. We must learn to regard the child as he regards himself. We must strike the right note and when we do, learning occurs. Our goal is so to work that each step "is an expression

¹ Stanley Cobb, *A Preface to Nervous Diseases*. Baltimore: William Wood and Company, 1936.

² James Plant, "The Individual and His Environment," *Educational Trends*, April-May, 1938, issue.

³ R. W. Gerard, "Higher Levels of Integration," *Biological Symposia*. Vol. VIII. Lancaster, Pa.: Jacques Cattell Press, 1942. p. 72.

⁴ Gordon Allport, *Becoming*. Yale Univ. Press, 1955.

of the child's own plan of being and becoming."

Re-examination of Practices

The foregoing principles operate within the child, but many present practices hamper their functioning and result in an inferior quality of learning. Space allows us only a mention of these.

The concept of grade levels is perhaps our biggest harassment because this practice is so firmly entrenched. No place else in our culture do we limit associations to a span of a chronological year. This method of organization lends itself to standardization of method and content and to the concept of learning as a "funneling in" process.

An extension of the grade level concept is that of ability grouping. In its virulent form it appears as three levels of reading groups within a grade, or homogeneous grouping by grades. Such practices are antithetical to the wholeness concepts so vital to mental health. Gerard states: "... the problem is to keep them (men in a group) sufficiently different so that they have something unique and worthwhile to communicate to one another."¹

A third practice that must be reconsidered is the system of rewards and punishments used as extraneous motivations for effort. The word incentive comes from a root word meaning to sound an instrument. We must abandon grades (often used as threats), competitive practices, and motivation-to-outdo for incentive if we are to expect quality in our human relationships.

The standardized content that comes from limiting teaching to basal texts and syllabi is another practice that stamps the misconception of levels upon our educational practices. Wholeness and uniqueness are fostered as we utilize a variety of materials, see that a wealth of interests

is represented in those materials, and respect a wide margin of error in "trying out" as those materials are used.

Beacons of Hope

And now a word about the other side of the coin. The beacon lights of schools designed and planned with and for children are spreading. Many primary schools are functioning so that children may achieve high levels of wholeness, and so that learning is integrative. We are learning that too much pressure, too soon applied, delays the acquisition of skill. A few schools are experiencing the challenge of grouping children representing an age span of three or four years—known as inter-age grouping. Thousands of teachers are recognizing that child study is one of the most productive inservice programs. And parents are likewise forming discussion groups to understand all children—not just *my child*. We are beginning to realize that the mind cannot be up-to-date by looking backwards during the period of schooling.

As we speak of levels, we advocate that we first recognize the fallacy of levels except as it applies to the individual's own recognition of his own internal growth factors and that we expand a concept of individual levels to include those really significant human functions of sharing, appreciating, valuing, communicating. These are functions not confined by verbal facility. They are the stuff of human relationships and give purpose to living and learning. As we help each child realize his own potentialities in satisfying his desires for communicating, for associating, for relating positively to others, for understanding himself and for sharing his own self, we shall be reaching higher and higher levels of learning. For as Laotzu said, "The way to do is to be."

¹ Gerard, *op. cit.*, p. 83.

Those Transition Periods

How can we understand transition periods in children's development? Transition in children's development is movement or progress from some reference point to another point on some defined continuum toward maturity. Walter Douglas Smith is an associate professor of psychology, Florida State University, Tallahassee.

TEACHERS AND PARENTS HAVE ALWAYS been concerned with children's growth stages principally because of an uneasy fear that something critical exists about a child's initial readiness for any activity. Frequently questions center around the proposition that if a period or stage should prove critical, either failure to learn or exposure to experiences too far beyond the child's capacities might leave irreparable effects to hinder future development. To a great extent these views have been experimentally or clinically verified. Readiness as an educational and growth concept has long been considered in curriculum construction and teacher training. Although real progress has been made in collecting both normative and longitudinal data on children's development, easy recognition of transition periods in growth still poses problems.

Even though not always easily recognized, stages or transition periods probably provide a major avenue through which understanding of human development is achieved. Without such reference points the total growth process threatens to become a bewildering pattern of confusing details, unrelated and without continuity of design. Parents recognize the child's mastery of new tasks as maturity signs in personality development. Yesterday's fear on entering nursery school changes to today's jaunty and eager dash from car to school door; the 4 year old's

consuming interest in color begins to give way to a concern with designs and details by 5.

What Is Transition?

Transition is evidenced continuously in the children all about us. The baby's first gasping cry, coming as a welcome sign, soon loses its importance in pulmonary inflation. Crying does not cease, each parent will attest, but its function shifts to that of a warning signal that all is not well with the child. As the speech apparatus develops, the warning signals begin to be expressed in words and calls for assistance sometimes supplemented by screams and kicks to get what is wanted. Nursery-school teachers report that 3 year olds show further progress by talking with one another to achieve their ends. The kindergarten teacher's technique of talking it over may be heard among the children as they say, "Let's talk it over," and thereby gives evidence of a marked transition in both language and social development.

Transition in children's development is movement or progress from some reference point to another point on some defined continuum toward maturity. New or increased interest in an activity, and new insights and ability to perceive new meanings, are among the well-known clues to transition periods. Other clues may be less easily accepted as evidence

of progress, such as the frequent "no" of the two-and-one-half or the deliberate rejection of parents' advice by the new adolescent.

Establishing Reference Points

Get acquainted with the child as he is now. Transition can only be noted in reference to some point of departure. One kindergarten teacher established reference points by observing that 5 year olds tend to be placid, relatively quiet, cooperative, and "they want to please." At the end of the kindergarten year she states that her children are approaching 6-year-oldness in that they are restless and want to show off; they are "as wild as mountain scenery."

Children can recall the reference points; Dickie, after several months of holding on to mother at the nursery-school door but finally gaining his emotional freedom, unconsciously recalls his own past when he pats sobbing Stevie on the back and says, "you want your mommy, don't you?" Understanding each child today so that tomorrow's progress can be observed becomes the first task.

Transition in Cultural Setting

Transition periods must be seen in their relationship to the child's daily world, the cultural setting. Sharing experiences comes as an expected part of nursery-school routine. Five year olds who can print their names and in whom the left-to-right pattern in writing is well-established are often reflecting the concern and efforts parents are expending in their zeal for early accomplishment. The club-directed behavior of third-grade girls must be evaluated in a cultural setting which provides such organizations as Brownies for this age group.

To enhance our understanding of children's transitions in development, an environment might well be provided in

which the child can behave spontaneously, where the freedom of expression encourages little masking of one's real feelings. The adult's role must contribute to that atmosphere of encouraged self-expression. The fourth-grade teacher who could not understand the freedom with responsibility which one teacher's class demonstrated, reported on her own teaching: "When we made a mural, I outlined it with chalk; they painted it in." The most human qualities of man must be developed through opportunities for self-expression and choice.

How Are the Adults Involved?

Understanding transition periods entails more than an ability to verbalize age norms and grade expectancies in relation to the child's psychological profile. Vital for teachers and parents is an ability to relate oneself to the child so that the transition does not rest merely at an intellectual level but becomes a part of "him and me," a part of the relationship that one senses, feels, and accepts—else the personal meaning that each step toward maturity holds for the child remains unknown.

The child's adults are also in transition; the parental anxiety aroused as the child graduates from one transition period to the next is not to be ignored. One's own needs to see change must be kept in mind lest the projection of these needs be recognized as change, or the reflections of these needs in cultural expectancies set a forcing pace for the child. There is much danger in the understanding which implies the poised hand ready to fire the gun which will send the child hurtling into the next developmental lap. Because the child is always in transition and no period is final, one must try to understand each child without looking constantly to nodal points or milestones on the way to maturity. Today's part of



Courtesy, Nursery School, Florida State Univ., Tallahassee

the journey is inherently important; how sad would be the life where today's worth rests solely on its preparatory value for tomorrow.

Forward and Backward

Cues for next steps and stages are generally made plain by the child. The older 5 year olds, in contrast to the new 5's, show in many ways lengthened attention span; the teacher says, "they'll sit and sit to listen to a story, and then ask to hear it again." The older 5's and new 6's show a new readiness for number experiences. The teacher says, "they'll count everything on the table; they are always comparing ages."

While this pressing urge forward is not to be ignored, it is not unusual that a bold step forward may be over-extended and result in some retreat. So 5-year-old Billy's bold challenge to the 7 year olds on the hill may result in strategic retreat as the challenge is accepted and the horde of Western gunmen descend in a yelling, whooping, threatening mass. A common error in perception

by the child's adults is an acceptance of behavior at face value resulting in parent or teacher blocking the way of retreat so that unwise choices (in terms of developmental reality) must remain effective—the entire plate of food must be eaten, the small bed is packed away permanently leaving no opportunity to return and be little again, the movie must be seen through its entirety because "you said you wanted to come." Each period entails both gains and losses, forward progress with frequent falling back as though to regroup one's forces. Forcing premature conformity can only result in the child's drawing his curtain of resistance or investing once friendly areas of his world with anxious concern which may overflow into all his relations with people and things.

As Steps to Long-range Goals

To understand transition periods, one must be aware of their contributions to the long-range goals of development. A point of view gathering strong support in recent years emphasizes the necessity for provision of emotional warmth and affection during infancy and the early years of childhood if an adult is to emerge who has the capacity to exchange love, to rear children successfully, and to share in a society requiring much sharing. Teachers recognize the concept of readiness and the critical nature of the contribution of the early school years to the intellectual-social-emotional development of the future.

Short-term transitions must necessarily be dramatic to ever reach the level of awareness in parents and teachers who remain with the child day after day. It is just the substance of these changes that provides the sparkle and challenge in child rearing which constantly reinforces one's efforts toward the long-range goals of maturity.

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Confusions Concerning Unit Teaching

Genuine concern for bringing together content organization and related experience in unit teaching is widespread. It is apparent that confusions about unit teaching are abundant; but that they are focal points for continuous experimentation and creative endeavor is the position taken in this discussion.

CURRENTLY IN EDUCATION "UNIT TEACHING" can mean almost any kind of organization and procedure. Meaning ranges variously from textbook unit to activity unit. At these extremes, real purposes for meeting children's needs through problem solving seem to defy identification. Between these extremes are many other formulations of unit teaching wherein sincere effort has been made to overcome the rather obvious weaknesses of textbook unit and activity unit teaching. Genuine concern for bringing together content organization and related experiences in unit teaching is widespread. It has too often resulted in less careful provision for the learners' involvement in the process than might be desirable, even though the learners' needs were considered basic at the outset.

When several people of wide experience with unit teaching gave attention to some of the common "confusions about unit teaching" the points most frequently mentioned had particular bearing, for the most part, on "how units are initiated" and "how units are evaluated."

Some of the common "confusions about unit teaching" which have implications

for the "initiation" and "evaluation" of units:

- What are the basic values in unit teaching?
- What subject matter areas should be included in a unit? One, two, or more?
- Should there be a framework of problem areas from which units are derived?
- How much pre-structuring of a unit should be done by the teacher?
- How are skill abilities developed in connection with unit teaching?
- How much of the school day should be set aside for unit teaching?
- How does one decide whether a unit should "go on" for one day, one month, a year, or longer?
- If children are involved in the selection of a unit how can one justify the use of time likely to be necessary in the process?
- How and when are culminating activities planned? What are some of the ways of evaluating unit teaching?
- What are the roles of the teacher in unit teaching?

Needless to say, the ways in which these confusions are handled, and to some extent resolved, are determined largely by the over-all curriculum design of a school. Rather than presuming to resolve these confusions for other interested people, it would seem more helpful to cite their treatment in one particular situation as evidence for the reader's consideration.

At University School the term "group study" has seemed to describe better "the heart" of the elementary school program

Mary Jane Loomis is associate professor of education. She wishes to acknowledge the suggestions of James Burr, College of Education; Paul Klohr, director, and staff members, Cecile Swales, Esther Schatz, Roberta Utterback, of University School. All are from Ohio State University, Columbus.

than does "unit" or "unit of work." The characteristics of a group study are summarized in the following statement. (3)

1. The group study is not preplanned in the sense that certain content in subject-matter areas is blocked out and prescribed for certain grades. Rather the unifying theme and many of the group's learning experiences are planned by students and teachers together as they investigate group needs and interests. The staff believes that many highly significant and valuable learnings occur most readily during the period of choosing the study.

2. The group study is not limited to a specific length of time. Usually it is the center for study and learning experiences for the entire year, but occasionally for longer or shorter periods. As children and teacher work together, new interests and problems emerge which broaden the original concerns and open up new areas for investigation.

3. The content of the group study is so broad that students find many opportunities to see the interrelatedness of many fields of knowledge. Thus they are helped to build their own integration of life's experiences into a unified whole. During the group study the fields of science, social science, mathematics, language arts, related arts, and physical education contribute with varying degrees of intensity and duration. Many so-called "academic" skills and facts are learned as integral parts of the group study.

Initiation of Unit Teaching

In terms of this point of view, it seems desirable to consider unit teaching as an emerging process in which "directional guides" rather than pre-planned units are starting points for building group studies. These "directional guides" would certainly draw heavily upon:

- facility with democratic action
- values in terms of the needs of society and individuals as well
- insights into the characteristic development of children at different growth levels
- understanding of learning theories
- ability with subject matter organization in a framework of problem solving.

A group study without the action and

volition of the learners in its selection is likely to be lacking in many dynamic qualities which are all-important in carrying it forward as a common enterprise. Powerful forces are brought into operation when a group sets out to determine a common undertaking. As children appraise together their past experiences, become articulate about their present needs and interests, decide on topics for investigation, they are dealing with realities of extreme importance to them. They are experiencing the give and take of co-action groups, not just talking about and consenting to follow through on a prescribed job.

Obviously, the role of the teacher becomes somewhat different. Perhaps he needs to be as willing, even as eager to learn, as children naturally are or are expected to be. By such an attitude the teacher demonstrates that he does *not* presume to be *an authority* on everything. As teacher and learners work together on common problems, locating, selecting, and organizing pertinent facts, the learners become aware of an important process. At the same time they see by live demonstration that "how to find out" is important for the teacher as an adult learner, too.

As *an organizer* the teacher demonstrates his ability to utilize educational theory and psychological knowledge in practical, yet valuable teaching-learning situations.

As *a disciplinarian* the teacher plays a supportive role in helping learners arrive at living arrangements and common agreements for behaviors that are reasonable and functional for working toward their common purposes. A minimum of rules and positive values seems to pay dividends in desirable social growth.

As *a guide* the teacher becomes somewhat of a coordinator of values. His

ability to sense and to respect the needs and values of learners does much to determine their levels of aspiration.

Bulwarked with some careful self-examination in terms of the foregoing values, insights, and understandings, the teacher embarks on the preplanning phases of a new undertaking. These might well include:

- Appraisal of the personnel of the group
- Appraisal of their past experiences
- Appraisal of their past needs and particular interests
- Appraisal of further needs and continued interests as recorded by the previous teacher
- Projection of tentative plans concerning possible areas of interest
- Projection of tentative plans concerning skill needs
- Collection of books and other materials appropriate in terms of foregoing findings for the classroom environment during the period of orientation.

Work with the children will begin through whatever channels lead to the establishment of positive relationships. The quality of living that prevails has much to do with the determining of pursuits and their accomplishment. The following 15 statements are suggestive of some of the more significant factors of process and content involved as teachers and learners work together toward some basic understandings and starting points for their own particular learning situations. (3)

1. Teacher and learners will profit greatly from consideration of summer experiences. (at most levels)
2. Their joint appraisal of past units of work will be mutually profitable.
3. Their consideration of needs as children see them will add to the evidence gleaned by the teacher from the records.
4. Their listing of suggestions for group study will be indicative of both new interests and old ones that have persisted.
5. Their ability in sensing relationships between suggested problems will reveal levels of understanding and areas of confusion.

6. Their ability to formulate and utilize criteria for a good study will give leads for teacher guidance in extending these capacities.

7. Their ability to use discussion techniques might well be appraised jointly at this point, and suggested improvements put into operation.

8. Their ability to clarify and discuss the problems under consideration with grade staff members or consultants will indicate gaps in group procedures, and understandings.

9. Their ability to utilize the suggestions given them and the information gained from exploratory reading will indicate pace-setting for the ongoing investigation.

10. Their ability to refine the list of problems will indicate readiness for more careful scrutiny of possibilities. At this point committees frequently assume responsibility for gathering data on resources for the different studies being considered.

11. Their ability to incorporate staff suggestions in their committee work is demonstrated.

12. Their ability to set up and follow through on agreements for both speakers and listeners in committee reporting situations reveals areas of control as well as areas for guidance.

13. Their ability to evaluate committee reports indicates the quality of rapport in the group, the cognizance of pertinent data, and the areas for guidance in evaluative procedures.

14. Their ability in appraising the findings of all of the exploratory committee reports is indicative of the proximity of consensus in selection.

15. Their ability to recognize that "this is it" indicates one level of co-action, while the call for a straw vote on first and second choices, for further evidence, indicates the need for another level of operation.

Evaluation as an Integral Part

It can be noted that many of the procedural clues and cues for selecting a group study which involve children's abilities in planning also involve them in "action" and in evaluation. Step by step as a group study is pursued, children are involved in a continuous cycle of planning, acting, and evaluating. (5) Thus, in actual practice, effective teach-

ing units emerge and are creatively designed by learners and teachers as they follow through on their own successive commitments. In this way of working, skill abilities are used functionally as tools. The motivation for their improvement comes through purposive interests and needs, and appropriate time is allotted them. Here again, evaluative measures can serve as directional guides in developing skills for their supportive role in unit teaching.

When evaluation inheres in all aspects of the teaching-learning process the values of some of the culminating activities of units also undergo revision. (1) The day-to-day evaluative processes may lead to the production of a play or the writing of a book. They may also indicate stopping short of major productions in full recognition of "value" in the ongoing quality of experience. Interests that have been generated can become the motivation for extensive self-propelled pursuits if they have not been subjected to exhaustive display in satisfying adult values which sometimes overweigh the values that children hold. Children are responsive to guidance in creating various ways of summarizing and culminating a study, as well as in developing new concepts and generalizations. (4) These can become rich resources for further learnings which, likewise, are often sacrificed through use of objective tests for evaluation. Such tests assess facts learned instead of abilities to utilize learnings operationally in related problem solving situations. (2)

When children are deeply involved in the continuous evaluation of a teaching unit their values are under careful scrutiny and subject to revision. Their interaction in terms of value judgments brings focus and meaning to their social living in realistic terms. Thus they can come to recognize that social learnings

themselves often need to be the material for evaluative study and selective action.

Our children at University School value their roles in the initiation of a group study or teaching unit, and in the evaluative procedures which give direction to its emergent design. Our staff considers time used in the selection of a study as time well-spent. It permits social living to undergird the teaching-learning process in ways conducive to the wholesome growth and development of children.

Thus, in this school, "confusions concerning unit teaching" are appraised in terms of dynamic learner-involvement in all aspects of the process. Many of the "confusions" relating to "initiation" and "evaluation" are continuously *re-solved* experimentally and creatively in terms of particular learning situations; others are more definitely resolved by the overall curriculum design of the school.

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2. Cunningham, Earl C. "Objective Tests and Progressive Educational Philosophy," *Progressive Education*, July, 1955, p. 117.
3. Committee of the Elementary Staff. *Group Studies in the Elementary Grades* "of The Ohio State University School." (Columbus, Ohio, 1955) College of Education, The Ohio State University, ref. (p. 3) pp. 3-4; ref. (p. 6) p. 19—an adaptation.
4. Laura Zirbes was the first director of the elementary school. With her guidance many of the "basic ideas" of the program were developed. She also served as consultant during the planning stages of this book.
5. Streitz, Ruth, "Subject-Matter Interpretations" in *The American Elementary School*, edited by Harold G. Shane, 13th Yearbook of the John Dewey Society. New York: Harper, 1953. pp. 318-344. p. 236 "...generalizations come into being based upon adequate data instead of upon a few isolated facts..."
6. ———. "An Evaluation of Units of Work," *Childhood Education*, Feb., 1939, pp. 258-261.
7. p. 258—"The 'canned unit' robbed the teacher and the pupils of the fun and intellectual stimulation which comes from real discovery and shared enterprises."

A School Explains Its Program

Here is a portion of a talk which George R. Reynolds gave at a parent and teacher meeting held at Cutter Mill School, Great Neck, N. Y., where he is principal. We are including it because it gives ideas for building common understandings among the team members.

TWO DIFFICULTIES ARISE WHEN WE look at today's school. The first is that it does not seem to resemble the school we remember. It is, in fact, different just as the 1953 automobile is different from the 1926 model. The second difficulty is that our memories are often faulty. It is like the discovery of the elderly playwright, Henri Bernstein, who, after studying himself in his new mirror remarked, "Alas, mirrors aren't what they used to be in my day." We are more apt to remember the "golden rule days" than the "hickory stick."

The fact is that schools are *not* as good as they used to be—they never were. When did you last hear this:

"When we were mere boys, boys had to do a little work in school. They were not coaxed; they were hammered. Spelling, writing, and arithmetic were not electives; and you had to learn. In these more fortunate times, elementary education has become in many places a sort of vaudeville show. The child must be kept amused and learns what he pleases. Many sage teachers scorn the old-fashioned rudiments."

1953? No—that was an editorial writer of the *New York Sun* writing in 1902.

"For a long time, I have noticed with regret the almost entire neglect of the art of original composition in our common schools. . . . Hundreds graduate from our common schools with no well-defined ideas of the construction of our language."

1953? No—that is taken from a speech by a superintendent of schools—made in 1844.

"The children now love luxury; they show disrespect for elders and love chatter in place of exercise. Children are now tyrants, not the servants, of their households. They no longer rise when elders enter the room. They contradict their parents, chatter before company and gobble up dainties at the table, cross their legs, and tyrannize over their teachers."

That was Socrates—some two thousand, three hundred years ago.

Children have always insisted, to the consternation of their parents and teachers, upon being children. Schools, it would seem, have always failed to do very much about it. As a school teacher, I take some comfort in the thought that *these* are the "good old days" for *today's* school children.

What Are the Facts?

The Superintendent of Schools of Milwaukee,¹ using the records of the Milwaukee school system of some 50 years ago, reported that almost 60 percent of the first graders of that time were failures, and that "two Milwaukee schools report their average age of promotion from first grade to second grade . . . was 8 years, 8 months."

Let us consider the effect of non-promotion on that 58 percent who were failures. The effects of failure upon an individual are known not only through carefully conducted studies, but they are also a part of the folk wisdom, the experience of all of us, sometimes called "common sense."

There are three general reactions to

¹ We Stress the Fundamentals, 91st Annual Report of the Superintendent of the Milwaukee Public Schools, W. W. Thiesen, Superintendent Pro Tem, 1950.

failure. To some, it is a challenge, and they attack the problem with renewed vigor and determination. Others become discouraged and escape from further efforts in some sort of rationalization. And some reject the failure in anger, develop attitudes of hate in the area of their failure, a reaction which pretty well removes them from the ranks of the educable.

These are reactions to occasional failure. Failure of promotion at the end of the year is only the culmination of constant and repeated failure over a whole school year. Such failure allows for only the last two reactions which are negative.

But what happens to school standards? At least, one might say, those first-grade failures learned what they were supposed to on the second, or possibly third time around. There have been many studies of the effect of non-promotion upon academic achievement. These studies show that schools which retard few pupils have significantly higher average achievement than schools with high non-promotion rates:

Caswell, Hollis C., and Foshay, A. Wellesley. *Education in the Elementary School* (2nd edition). Pp. 354-5. New York: American Book Co. 1950.

Cook, Walter W. *Grouping and Promotion in the Elementary School*. Series on Individualization of Instruction, No. 2, p. 28. Minneapolis: Univ. of Minn. Press, 1941.

Report of the Division of Educational Research and Results for the Year Ended June 30, 1933, p. 21. Board of Education, Philadelphia, 1933.

These studies show further that two-thirds or more of the children who repeat a grade do no better or do no worse after repeating:

Annual Report of the Superintendent of Instruction of the Commonwealth of Virginia with Accompanying Documents for the Year 1937-38, pp. 16 and 25. Board of Education, Richmond, Va.

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There are probably many reasons for this, but in a nutshell—"nothing fails like failure." Failure means fear and frustration, and these have never been a sound foundation for learning.

Our school does not believe in either extreme. We do not have automatic promotion. Neither do we have a high rate of failure. Knowing our educational resources, we attempt to know as much as we can about the individual child, and then we make a decision as to whether we can do most for the child on the same grade level, or on the next grade level.

Let us look at that 8 years, 8 months first grade promotion figure for 1902. At 8 years, 8 months, most of our youngsters are going into the fourth grade.

There are few figures with which to check how time in school is spent. Milwaukee's superintendent¹ figures on time spent in each of the various activities by one class on each grade level from first through sixth grade during one school week. Take recess time. In 1900, the time spent in recess was 15 hours and 25 minutes. In 1950, recess accounted for 10 hours and 50 minutes of school time, approximately one third less. More time was spent in social studies, science, art, music, and health in 1950 than in 1900.

There has been a small drop in the time spent with language arts—in 1900, 66 hours, 5 minutes—in 1950, 60 hours, 5 minutes. The change can be accounted for in a number of ways. In 1900 (and in 1953 in many places), subject matter areas were strictly compartmentalized. I once taught in a school where youngsters saw no relationships between spelling and their own English work, much less in science or social studies. Spelling

¹ Ibid. *We Stress the Fundamentals*, p. 4.

ACEI
1956
Study Conference
WASHINGTON, D.C.
April 1-6



Theme:

*"Exploring Resources for
Work with Children"*

VISIT agencies and organizations working with children

LEARN how they can help you

STUDY how you can help children

HEAR inspiring speakers

SEE AND ENJOY Washington in the Springtime

Nonmembers and members invited

TENTATIVE SCHEDULE—1956 ACEI STUDY CONFERENCE

April 1-6 ★ Washington, D. C. ★ Headquarters: Sheraton-Park Hotel
Theme: "Exploring Resources for Work with Children"

	SUNDAY, APRIL 1	MONDAY, APRIL 2	TUESDAY, APRIL 3	WEDNESDAY, APRIL 4	THURSDAY, APRIL 5	FRIDAY, APRIL 6
MORNING		9:00 General Session "Looking Ahead at the Week" 10:40 - 12:00 Exploration Sections	9:00 - 12:00 Exploration Groups	7:30 Regional Break- fasts 9:30 - 12:00 Exploration Sections	"Morning on the Hill"	9:00 General Business Session 10:15 General Session
AFTERNOON	2:00 - 8:00 Registration	2:00 - 4:30 Choices: Special Interest Groups Visits to ACEI Hdqs. Visits to Other Organizations Functional Display— Studio Activi- ties	2:00 - 4:30 Choices: Visits to ACEI Hdqs. Visits to Other Organizations Functional Dis- play—Studio Activities 2:00 - 4:30 ACE Work Sessions— Branch Forums Publications Representa- tives 4:45 - 5:45 State Get-To- gethers	2:00 - 4:30 ACE Work Sessions— Branch Forums 4:45 - 5:45 ACEI Committee Meetings— Open to all Interested Registrants	Observing Children at Work and Play Visiting Embassies Sightseeing Film Reviews	Sightseeing
		2:00 - 4:30 ACE Work Session —State Officers				
						SATURDAY, APRIL 7 Meeting of National Council for Elementary Science
EVENING	8:30 General Session	8:30 Open Editorial Board Meeting	8:30 General Session Talking It Over	8:30 General Session Talking It Over	8:30 General Session "International Night" 9:30 Talking It Over	



NOTES: Conference registration in Washington, D. C., will be held in the Sheraton-Park Hotel. Hours—Saturday, March 31, 2:00 to 4:30 p.m.; Sunday, April 1, 2:00 to 8:00 p.m.; Monday and Tuesday, April 2, 3, 8:00 a.m. to 6:00 p.m.
Registration and other conference information will be at Sheraton-Park Hotel, Washington, D. C., April 1, 9:00 to 8:00 p.m.; Monday through Thursday, April 2, 5, 8:00 a.m. to 6:00 p.m.

The Association for Childhood Education International *1956 Study Conference*

April 1-6 - Washington, D. C.

Theme: EXPLORING RESOURCES FOR WORK WITH CHILDREN

At the conference in Washington, D. C., you will work with people who are concerned, as you are, for children. Opportunities to focus on the needs of children and to explore resources for meeting those needs will be provided. In planning the program the ACEI Executive Board considered the suggestions of those who attended previous conferences. Nonmembers are also invited.

SPECIAL FEATURES

Exploration sections and groups: Lectures by outstanding leaders in education and child care. Visits to agencies, organizations and other centers. Emphasis on exploring resources for work with children.

Visits to educational and recreational centers for children

Visits to embassies and legations of many countries

Visits to headquarters of organizations and agencies, including ACEI.

Visits to Capitol Hill: Discussing with legislators ways of improving opportunities for children by legislative means.

Sightseeing: Visiting interesting and historical places.

General sessions: Inspiring and informative lectures and discussions.

Branch forums: Discussing branch activities and exchanging ideas.

State get-togethers and regional breakfasts: Becoming acquainted; exchanging news of ACE in states and regions; having fun and fellowship.

Open ACEI committee meetings: Discussing ongoing committee work and suggesting needed projects.

Film reviews: Viewing films for and about children.

Special interest groups: Working with others interested in such areas as nursery school, church school and legislation affecting children.

*Exhibits related to arts, crafts and education of many countries—*arranged with cooperation of embassies.

Functional Display: Becoming acquainted with desirable educational materials.

Branch Materials Center: Reviewing ACE branch materials.

Pamphlet Center: Browsing among current educational publications.

National Council for Elementary Science Meeting: Opportunity for registrants to attend meeting of National Council for Elementary Science, Saturday, April 7. Non-registrants also welcome.

PLACE

Headquarters will be at the Sheraton-Park Hotel. General sessions and group meetings will be held in Hotels Sheraton-Park and Shoreham.

Note: To insure the best use of limited time and to aid in arriving at wise decisions, the Executive Board asks that items of new business be given in writing to some member of the Board before Monday, April 2. (See Standing Rule No. 2, ACEI Constitution.)

This section of **CHILDHOOD EDUCATION** has been so planned that it can be detached without disturbing the rest of the magazine. Those wishing to attend the conference are asked to use the forms on page 7.

NOTES: Conference registration in Washington, D. C., will be held in the Sheraton-Park Hotel. Hours—Saturday, March 31, 2:00 to 4:30 p.m.; Sunday, April 1, 2:00 to 8:00 p.m.; Monday and Tuesday, April 2, 3, 8:00 a.m. to 6:00 p.m. Monday through Thursday, April 2-5, 8:00 a.m. to 6:00 p.m.

EXPLORATION SECTIONS

The conference theme, "Exploring Resources for Work with Children," and the opportunities available in Washington suggest that the emphasis during the week may well be on discovering sources of help. The exploration sections correspond to the study groups of other conferences. They will provide for listening, for discussing, for exploring—all valuable aids to learning.

Exploration section activities are scheduled for three successive mornings:

Monday

Eleven section meetings—each section will:

Hear a background lecture on section topic.

Divide into small exploration groups (not to exceed 25).

Tuesday

Each exploration group, with liaison persons and commentator, will meet at place agreed upon on Monday to:

Explore resources of agency or organization.

Participate in discussion led by commentator and agency representative.

Wednesday

Eleven section meetings—each section will:

Hear a report on most important experiences of exploration groups and discuss use that can be made of findings.

Study the section topics carefully. Enroll in the one that seems to offer you the most help. Send your registration to ACEI headquarters in Washington soon so that you may be enrolled in the section of your first choice, if possible. (You will choose your small exploration group at the Monday morning meeting of your section.) Complete information about the many exploration groups will be printed in the official program distributed at the conference registration desk in Washington, D. C.

Section I. Exploring Resources for Helping Children Grow toward World Understanding

Groups will visit such places as:

Pan American Union

Voice of America

Coordinator: Bess Goodykoontz, Office of Education, Department of Health, Education and Welfare, Washington, D. C.

Lecturer: Leonard Kenworthy, Brooklyn College, Brooklyn, N. Y.

Section II. Exploring Resources for Understanding Children

Groups will visit such places as:

Department of Health, Education and Welfare

National Research Council

Coordinator: Geneva Flickinger, State Department of Education, Baltimore, Md.

Lecturer: Daniel Prescott, University of Maryland, College Park, Md.

Section III. Exploring Resources to Help Children Understand Science

Groups will visit such places as:

National Geographic Society

Museums

Coordinator: Glenn Blough, University of Maryland, College Park, Md.

Lecturer: Beatrice Hurley, New York University, New York, N. Y.

Section IV. Exploring Resources for Enriching Children's Experiences with Music

Groups will visit such places as:

Smithsonian Institution

Music Room, Library of Congress

Coordinator: Vanett Lawler, Music Educators National Conference, National Education Association, Washington, D. C.

Lecturer:

Section V. Exploring Resources for Enriching Children's Experiences with Art

Groups will visit such places as:

Corcoran Gallery of Art
Freer Gallery of Art

Coordinator: Margaret Hass, Arlington, Va.

Lecturer: Edwin Ziegfeld, Columbia University, New York, N. Y.

Section VI. Exploring Resources for Enriching Children's Experiences with Literature

Groups will visit such places as:

Folger Shakespeare Library
Library of Congress

Coordinator: Helen Mackintosh, Office of Education, Department of Health, Education and Welfare, Washington, D. C.

Lecturer: Elizabeth Goss, Enoch Pratt Free Library, Baltimore, Md.

Section VII. Exploring Resources for Enriching Children's Experiences with Radio and TV

Groups will visit such places as:

Television stations
Radio stations

Coordinator: Gertrude Broderick, Office of Education, Department of Health, Education and Welfare, Washington, D. C.

Lecturer: Betty Girling, University of Minnesota, Minneapolis, Minn.

Section VIII. Exploring Resources for Enriching Children's Experiences with Creative Dramatics and Play

Groups will visit such places as:

Puppetry center
Children's theatre center

Coordinator: Alice Robinson, Public Schools, Montgomery County, Md.

Lecturer: Emma Sheehy, Columbia University, New York, N. Y.

Section IX. Exploring Available Research Sources

Groups will visit such places as:

American Home Economics Association
National Education Association

Coordinator: Walter Waetjen, University of Maryland, College Park, Md.

Lecturer:

Section X. Exploring Resources for Helping Children Understand and Appreciate Their Heritage

Groups will visit such places as:

C & O Canal Locks
Octagon House

Coordinator: Merrill Hartshorn, National Council for Social Studies, National Education Association, Washington, D. C.

Lecturer: Pauline Hilliard, University of Florida, Gainesville, Fla.

Section XI. When Parents, Teachers and Others Work Together

Groups will visit such places as:

Cooperative nursery school
Public school playground developed by parents

Coordinator: Ethel Thompson, Public Schools, Arlington County, Va.

Lecturer:

REGISTRATION

Early registration by mail reserves for you a place in the section of your choice. Use the form on the opposite page and enclose your check or money order.

Pre-conference registration by mail, January 3 - March 18	\$10.00
Undergraduate Student	\$ 4.00
Late registration in Washington, D. C., March 31 - April 2	\$11.00
Undergraduate Student	\$ 4.50

When your registration form and check are received at Washington headquarters, a receipt and information on sightseeing will be sent to you.

In Washington, D. C., you will present your receipt at the conference registration desk, Sheraton-Park Hotel, and receive: official badge—admits you to conference sessions; exploration section admission card; official program. (The conference report will be mailed to you before the end of May.)

Late registrants: Those who wait to register in Washington, D. C., pay more and cannot be assured of enrollment in sections of their choice.

Special note: No provision is made for registration for less than the total time of the conference, since events planned for the six days are closely related.

Refunds: Those registering but unable to attend the conference may receive a refund of \$9 (to undergraduate students, \$3.50) by sending the *Official Receipt* to headquarters in Washington before June 1. Refunds cannot be made after the close of the Association's fiscal year.

HOUSING

Hotels and rates are listed here. Use the form on the opposite page. For purposes of economy, it is suggested that students request large double or twin rooms with additional cots.

Most conference meetings will be held at the hotels starred.

Hotel	Single Rm.	Double Rm.	Twin Rm.	1-Bedrm. Suite	2-Bedrm. Suite	Each Add. Cot
Dupont Plaza	\$8.50 - 9.50	\$11.50 - 12.50	\$11.50 - 13.50	\$18.00 - 24.50	(none)	
*Sheraton-Park	7.50 - 12.50	11.00 - 16.00	11.00 - 16.00	12.50, 15.00, 18.50, 22.00	\$40.00	\$3.00
*Shoreham	9.00 (no single rooms; use twin at single rate)	(none)	14.00 - 15.00	20.00 (most) 25.00 (few)	34.00 45.00 (end suites only)	2.00
2400	5.00 - 8.00	8.00 - 12.00	8.00 - 12.00	15.00 - 20.00	20.00 - 25.00	
Windsor Park	6.00 - 9.00	8.00 - 12.00	8.00 - 12.00	16.00 - 22.00	20.00 - 30.00	

CLIP ALONG DOTTED LINE AND MAIL TO:
ACEI HOUSING BUREAU
1616 K ST., N.W., WASHINGTON 4, D. C.

REQUEST FOR PRE-CONFERENCE REGISTRATION

Mail to: Assn. for Childhood Education International, 1200 15th Street, N.W., Washington 5, D. C.

Miss

Mr.

Mrs.

(Surname first)

Street: City and State:

Name of public school system, private school or institution with which you are connected:

Check only ONE item — professional status:

- | | | |
|--|---|--|
| <input type="checkbox"/> College or Univ. Faculty Member | <input type="checkbox"/> Librarian | <input type="checkbox"/> Superintendent |
| <input type="checkbox"/> Community Worker | <input type="checkbox"/> Nursery School Teacher | <input type="checkbox"/> Supervisor |
| <input type="checkbox"/> Intermediate Teacher | <input type="checkbox"/> Primary Teacher | <input type="checkbox"/> Undergraduate Student |
| <input type="checkbox"/> Kindergarten Teacher | <input type="checkbox"/> Principal | <input type="checkbox"/> (Other)..... |

Are you a parent of a child between the ages of 2 and 12? ☐

Check only ONE item — membership status:

- | | | |
|---|---|--|
| <input type="checkbox"/> ACEI Life Member | <input type="checkbox"/> ACE Branch Delegate, please give name of branch: | <input type="checkbox"/> ACE Branch Member |
| <input type="checkbox"/> International Member | | <input type="checkbox"/> Nonmember |

Registration prior to March 18, 1956

Registration after March 18, 1956

Registration fee \$10 ☐

Registration fee \$11 ☐

Undergraduate Student \$4.00 ☐

Undergraduate Student \$4.50 ☐

Enclosed is my registration fee for the 1956 ACEI Conference in Washington, D. C. \$.....

Exploration Section Registration

Miss

Mr.

Mrs.

(Surname first)

Street: City and State:

Select in *order of preference* the 3 sections in which you are most interested. Please make your choices carefully. Indicate your preferences below. (See list of sections on pages 4 and 5.) Assignments will be made in the order in which registrations are received. A verification of your assignment will be mailed to you with your registration receipt.

1st choice.....	2nd choice.....	3rd choice.....
Section No.	Section No.	Section No.

REQUEST FOR HOTEL ACCOMMODATIONS

Mail to: ACEI Housing Bureau, 1616 K Street, N.W., Washington 6, D. C.

Note: Arrange for double occupancy of rooms wherever possible, since single rooms are limited in number. Confirmation will not be sent before February 1.

Date:.....

Accommodations desired:

Hotel (1st choice)..... Hotel (2nd choice).....

.....Room with bath for 1 personLarge room with bath for.....persons

.....Room with bath for 2 (double bed)Suite for.....persons

.....Room with bath for 2 (twin beds)

Date and hour of arrival..... Date and hour of departure.....

Names and addresses of all persons to occupy rooms: (Please print.)

.....

Signed.....

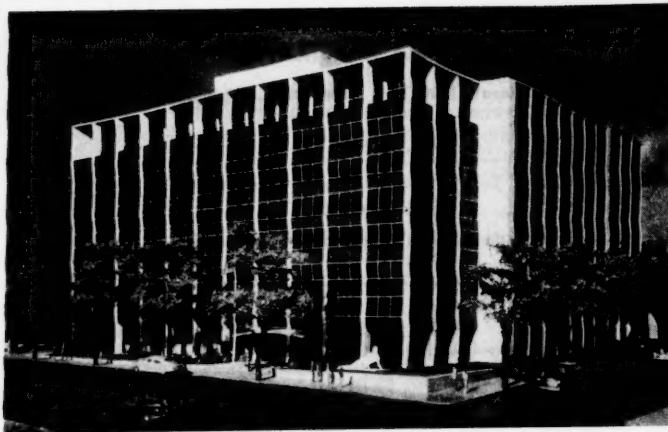
ACEI Study Conference, Washington, D. C., April 1-6, 1956

CLIP ALONG DOTTED LINE AND MAIL TO:

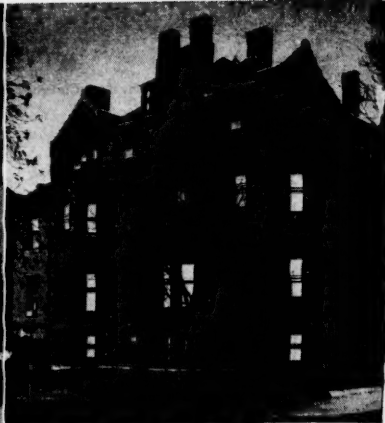
ASSOCIATION FOR CHILDHOOD EDUCATION INTERNATIONAL, 1200 15th STREET, N.W., WASHINGTON 5, D. C.

CLIP ALONG DOTTED LINE AND MAIL TO:

ACEI HOUSING BUREAU
1616 K ST., N.W., WASHINGTON 6, D. C.



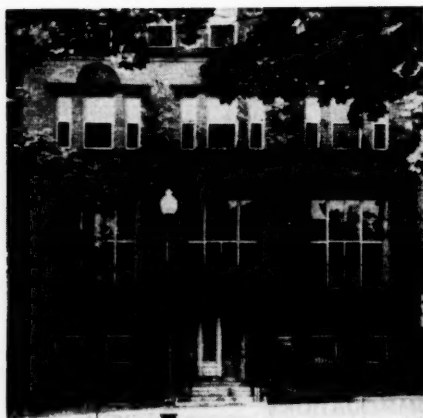
NATIONAL EDUCATION ASSOCIATION



AMERICAN HOME ECONOMICS ASSOCIATION

For further information write to:

ASSOCIATION FOR CHILDHOOD EDUCATION INTERNATIONAL
1200 FIFTEENTH STREET, N.W.
WASHINGTON 5, D. C.



LEFT: AMERICAN ASSOCIATION OF UNIVERSITY WOMEN

RIGHT: AMERICAN COUNCIL ON EDUCATION

U. S. DEPARTMENT OF HEALTH, EDUCATION AND WELFARE



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was spelling, and as long as they got 100 in spelling tests, they cared very little how they spelled elsewhere. We teach English when we teach science; we teach research skills when we teach social studies; we teach reading when we bake cookies or build a house, in addition to the direct teaching of reading at reading time.

Second, we know a lot more about the teaching of reading than we did in 1900. Considering the tremendous advances made in medicine, in technology, and the pure sciences, and in the other areas of our life, it should not be surprising that our talents for research and experimentation have also accomplished much in the area of the three R's. There is nothing haphazard about the changes which have taken place in the teaching of reading.

Third, literature is no longer an isolated period in the day when children waded through "Abou Ben Adam." The weekly library circulation for the Cutter Mill and Cumberland Schools, with something over 400 pupils, is approximately 600 books.

The most significant drop is in the time devoted to the teaching of arithmetic—in 1900, 20 hours, 50 minutes—in 1950, 14 hours and 10 minutes. There are several reasons for this change:

- We have cut out a lot of dead weight in this subject. We are not so concerned as we used to be with making sure that a child can figure out where a locomotive traveling 55 miles per hour will overtake another locomotive traveling 40 miles per hour; nor are we worried about their ability to add such fantastic common fractions as seven thirteenths and three sevenths.

- We have learned a few things about the value of drill. We have learned, for example, that for the amount of time devoted to it, drill is one of the most uneconomical of ways to get understand-

ing. With enough repetition, you can teach a normal 4 year old to say "eight times eight is sixty-four," but he will not have the slightest idea of what the word "eight" means, much less "sixty-four" or "times." Drill or practice is, of course, important, and we have not eliminated it. It is important for *one* thing—to fix and to speed up for economical and efficient use things *already* learned.

- Teachers teach arithmetic in almost everything they do—in figuring out how many containers of milk are needed, in taking attendance, in conducting a sale, or collecting Red Cross money, and so on, throughout the entire school day.

Parents knew how their child was doing and where he stood in the old days. But did they? They had a monthly report card which said 65 percent in arithmetic, 83 percent in geography, and so on. An interesting experiment was conducted in this area. A large group of mathematics teachers was given a set of geometry papers to mark. These were specialists, and this was mathematics, as precise a subject as could be used. Marks ranged as much as from 28 percent to 92 percent on the same paper. Heaven only knows what the spread would have been had they marked English or social studies papers.

If evaluation is to have meaning, both parent and teacher must understand exactly what is being evaluated; both must have the same understanding of what the marks mean, and the marks must be reliable and unvariable. Such conditions have never existed, and parents and teachers both have been fooling themselves in thinking they have. The truth is, that even *good* teachers have included in their marks, according to their own lights, such things as behavior, effort, attitude, work habits, achievement, ability, attendance, neatness, and even reputation (or previous marks). The parent

who does not know which of these attributes have been included in the mark, or how much weight has been attached to each, can hardly know how his child is doing, how the child compares with other children, or what kind of progress he is making.

WE ARE ALL EDUCATORS. SOMEONE HAS described teachers as part-time parents, and parents as full-time educators. But there are some who have complained

that the modern school has usurped the functions of the home. The idea is a mistaken one. No school was ever a substitute for a good home. No school that knows anything about the things that make it possible for an individual to understand and respect himself and others could be so nearsighted as to see itself as capable of working alone. We are partners not only because we *want* to be, but because we *must* be, if we are to serve the interests of our children.

THE WORLD IS MADE UP OF THE HAPPY AND THE SAD; THE STRONG AND THE WEAK; the good and the bad; the wise and the foolish; the successful and the failures. For a long time it has been that way; and for a long time to come it will continue so to be.

Religion has been given to us for one great purpose—to share our good fortune with others, not to keep good fortune to ourselves. What others lack, let us supply; and, in return, what we do not have, others will give. This is the heart of religion and the spirit of Christmas.

Religion is a deep recognition that behind man and the world stands God; that as we have enough faith, He is a Father and Friend in every hour of need; that if we want to be on His side, we must live honestly, fight for justice, and be true to the better part of our natures; that in return for whatever blessings we get out of life, we shall be ever ready to do for others what we would wish them to do for us. As your religion inspires you towards these things, hold on to it.

Christmas and the Festival of Lights season gives each of us the opportunity to share with others.

May this Season reassure your faith in the Fatherhood of God, and may the New Year bring Happiness and Contentment.

—RUFUS A. PUTNAM
Superintendent of Schools
Minneapolis, Minnesota
Christmas 1954

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The Development of Scientific Concepts in Childhood



Courtesy, Margaret Hampel, Huntington, W. Va.

Scientific—from the moment of birth

By JOHN GABRIEL NAVARRA

TRADITIONALLY AMONG EDUCATORS there has been a fundamental recognition that the construction of curriculum materials should be based on an understanding of the individual child and how

he learns. Often the recognition of this underlying base to curriculum construction is more implicit than explicit. However, as one examines the succession of programs which have been proposed in

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the last 100 years for the child of nursery as well as elementary school age, one comes to the realization that each program was and is to a measure based on a particular understanding of the individual child.

Educators generally agree that the child "learns by experience." However, when individuals are pressed as to what is happening when a child learns by experience and how and why it is happening, they often express opinions which are basically and widely different. These differences of opinion as to the process and factors involved as an individual child learns by experience have a decided effect on the program in which children are encouraged to engage.

How We View the Individual

Divergent understandings of the individual have had an especially marked effect on the programs of elementary science. Historically, the modern elementary school science program has developed from a dynamic approach to child study. The modern program is the direct antithesis of the Nature Study Program current in the 1920's and of which we can still find some remnants. The adherents of the Nature Study Program, with its major emphasis on plant and animal materials, to an extent based their program on a view of the child which might be stated as follows: "The powers of logical reasoning have not yet developed in the minds of grade children, and *abstract principles* cannot be visualized by them . . . neither can reliance be placed on any appreciable previous knowledge possessed by children."

Until rather recently, especially among lay groups, one could find many who would agree that "children don't learn

much of significance before they begin school." Of course, they would be willing to admit that a child learned to walk and talk and *a few other things*; but the real learning, the proponents of this view insisted, was under the auspices of the school.

Probably among the first to recognize the importance of the preschool period were the elementary-school teachers. The classroom teacher living and working with children cannot help but observe that every child comes to school with a definite individual orientation to his environment. Each child brings a rich complex of preschool learnings that inevitably affect his response to classroom experiences. The modern elementary science program recognizes the importance of the preschool period in the child's life. It attempts to build on, broaden, and give depth to the vast number of concepts that have had their inception during the first six years of a child's life.

Scientific from Birth

We have only begun to fathom and explore the early conceptual development of the individual. Any attempt to build up a consistent step-by-step picture of the learning process in the first two years is besieged by difficulties. However, even casual observation of a child from birth through his second year indicates that most children are driven by an inquisitiveness—a type of "poking-into-ness" which demands they look into, behind, and under most objects with which they come in contact. The greater part of a young child's activity is devoted to the acquiring of information and the building up of expectancies about his environment. In the best sense of the word—*this is basic, rudimentary scientific activity*.

This compulsion to be inquisitive and

John Navarra is assistant professor of science, East Carolina College, Greenville, North Carolina.

to "poke into" stems from some inner urge. What lies behind this urge or compulsion is difficult to say; but we see the outward manifestation of it in the incessant drive of the young child to find out about his environment. This drive to come to know and to interpret appears to be a basic motivation in the life of the child; and *this drive* which we have come to recognize as the prime mover of conceptual growth in the child has probably always been a component of intelligent activity. It is probably the drive out of which the human activity we call science evolved.

There are numerous definitions for the intriguing enterprise we call science. However, historically science may be viewed as the process by which man has attempted to interpret, to live effectively within, and to change his environment. The young child is roughly engaged in this same process. Many of the first concepts he develops allow him to live more effectively within his environment. Even the tantrum is an attempt by the child to change and exercise a measure of control over his environment. In its own way, the greater majority of the child's activity is naturally and crudely scientific.

Roots of a Scientific Attitude!

Many of the child's early concepts within the first two years of life are related to the child's growing awareness of himself and his attempt to control things in the outer world.¹ This urge in the young child which we have designated as scientific would seem to be based in some manner on a *strong will* to control and understand.

From all indications the adults with whom the child is intimately and emotionally involved have a decided effect on this drive and the ability of a child to

operate in this crude but effective scientific manner. Many of these early concepts and the resultant behavior pattern which may be designated as scientific are offshoots of feeding, sleeping, and elimination.

Many of the children in our study thus far show the beginnings of a crude scientific approach and attitude. They have a strong independent flair. This independence is often shown quite decidedly in feeding.

One little girl of 17 months would take the spoon from her mother and insist, "I do it. I feed it." At approximately 19 months this little girl would play with dolls and attempt to feed them. She would bring the spoon filled with food to the doll's lips and say, "Here baby. Eat-dit."

Slowly and gradually this little girl's experiences with feeding herself and her dolls grew into a concern with the mouth and talking, the feet and walking, and a crude beginning to the differentiation of things that are alive from things that are not alive. Eventually these concepts began to enlarge into a rudimentary concept of death. The other children with whom we are concerned in our study are developing some of these same scientific concepts; however, each is doing it in a uniquely different way. The events and experiences differ quite markedly; but the developing concepts have an underlying core of similarity.

At 16 months and before, all of the children with whom we have been concerned have a name which they associate with the waste product of the intestine. The names vary: poo-poo, shoo-shoo, and ca-ca are the terms most frequently used. Even casual observation of children during the early phases of infancy reveals that they apply these terms to other objects.

Clay with which a 14 month old boy was playing was referred to by him as poo-poo. He ran to the toilet, threw the clay in the bowl.

¹ This section is based on the records of Kimberly, Dickey, Elisa, and other children in the process of being studied by the author and his wife, Celeste.

and waved his hand saying, "Bye-bye, poo-poo."

A little girl (LC—16 months old) had her first encounter with freshly turned soil. LC squatted beside the patch of soil and pushed her fingers into it. She stood up and wandered off. Then she returned with two small pebbles which she proceeded to push into the loose soil. LC picked up a lump of soil. Her hand tightened and the soil crumbled. She picked up a big lump of soil and said, "Poo-poo." LC placed the lump of soil on the steps which were nearby. She picked up two more lumps of soil—placed one lump on the steps and turned to hand the other to the adult who was standing nearby. LC extended her hand and said, "Ca-ca." As she said this the lump of soil fell from her hand to the walk and crumbled. She squatted beside it and felt the crumbles. Then LC picked up another lump and deliberately threw it to the walk and again felt the crumbled bits of soil. She repeated this a number of times. LC selected a particularly large lump of soil. She carefully placed it on the steps and deliberately broke it up. Then she rubbed her right hand back and forth in the soil.

The children in both cases are going through a process of differentiating clay and soil from the waste product of the intestines. The important point is that the concept of poo-poo develops early and has a marked self reference which in turn has an effect on future concepts which develop. As one observes children, it becomes increasingly clear that there are strong personal, emotional, and kinesthetic factors involved in early concepts. The coming and going of people and objects is another important factor in this business of control. A brief indication is given in the little boy's saying, "Bye-bye." The peek-a-boo games enjoyed by these children would also seem to have a basis in this will to control. The laugh which accompanies the return of the object or person in peek-a-boo is almost akin to a laugh accompanying a release from an anxious or tense situation.

Many other concepts during infancy

have their roots and beginnings in the organic activities of sleeping, eating, and eliminating. The control established during toilet training is an important step for the young child. It would seem that out of these early processes the infant is developing a basic orientation to experiencing and relating, and thus learning. The way the child is handled by the adults seems to affect his view of the world and as a result his basic pattern of behavior. In the cases of many children this pattern of behavior which underlies the thoughts and actions is crudely scientific. It is the genesis of this scientific attitude and behavior with which we should be concerned. The roots may very well be in these early years and related to these early experiences.

They Observe and Generalize

It certainly is not easy to estimate the true significance of the early experiences through which a young child is living. Many times they appear to be disconnected, segmented, and discrete. The underlying core or link is difficult to trace.

Examine the way in which one child observed and generalized as he developed an initial concept of melting. This sequence has been selected from a book which develops in detail the process by which one little boy (L.B.) learned by experience.¹ The initial record in the sequence as reported below was taken approximately three months after his third birthday. (We have used "R" for records of what happened. "C" stands for "Comment" or "Pertinent Features.")

R.—Aug. 9.

L.B.: "Please give me a drink of water—my mouth is thirsty."

He was given a glass of fruit juice. L.B. drank some of the juice and then scooped the ice cubes out of the glass. He rubbed the cubes

¹ Navarra, John G. *The Development of Scientific Concepts in a Young Child: a case study*. New York: Bureau of Publications, Teachers College, Columbia Univ., 1955.

over the table. As he played, little puddles of water began to collect on the table.

C. The child has had many contacts with ice cubes. This record is typical of many of the experiences he has had. The water which covered the table provided a definite feeling of melting ice. Although there was no verbalization, the relationship of ice cube to water was well within his experience.

R.—Aug. 9.

L.B.'s mother was replacing an ice tray in the refrigerator. L.B. patted a shelf of the refrigerator.

L.B.: "It's cold in here. Is this where the ice lives?"

Mother: "Yes."

L.B.: "Why do you put the ice in here?"

Celeste withdrew the tray which had just been placed in the freezing compartment and showed him what she had just placed in the tray.

Mother: "We put water in the trays and the water freezes and becomes ice. After the ice cubes are made, they have to be kept cold or they will melt."

C. The child has recognized that it is cold inside the refrigerator. He seems to be aware that cold and ice go together since the refrigerator is where "the ice lives." However, he is not sure why the ice is put in the refrigerator. This would seem to indicate that he is not familiar with water-to-ice relationship. The question would also suggest that his concept of melting ice does not imply any other conditions such as heat.

R.—Nov. 27.

L.B. wanted to sail a small boat in the sandbox which did not have any sand in it. Celeste asked if he wanted her to open the valve while he used the hose to fill the box, but L.B. answered, "We have lots of water." Then as he approached the sandbox, he exclaimed, "Hey, it's like ice. Look, it's all ice." Mother asked, "Is it hard?" L.B. responded, "Yes! It's ice." L.B. attempted to pick up pieces of wood which were imbedded in the ice. Shaking his head, he said, "You can't even move the wood—Hey is that cold!"

L.B. cracked the ice by chopping it with

a toy rake. Much to his surprise he discovered water under the ice. As he broke through, he said, "There's water under there."

C. Change in atmospheric temperature brought about the freezing of the water which was in the child's sandbox. L.B. was surprised when he found that the sandbox contained ice. From his actions, he also seemed surprised when he found water under the ice. Thus, in this record we find the items water, ice, and cold. However, the relationship between the items is not made explicit by the child.

R.—Nov. 27.

John came out to play with L.B. As he approached, L.B. called to him. "Look, John, it's all ice."

Mother inquired, "I wonder how all this ice got here." L.B. answered by asking a question of his own, "Did the water turn to ice?"

C. In the previous record, L.B. indicated that he expected to find water in the sandbox. In this record his greeting to John seems to imply that he recognizes the change from water to ice, but his answer of a query with a query would seem to indicate that he is not quite sure, and may have some reservations as to what happened.

R.—Nov. 27.

L.B. and John cracked the ice.

L.B.: "Let's play that we're icemen and we can put the ice on the back of the truck."

John: "No, it's too cold."

L.B. proceeded to play as he suggested and John very quickly joined him.

C. The item "cold" seems to be fairly well established within their experience as a quality of ice.

R.—Nov. 27.

L.B. and John were playing with ice which they had gotten from the sandbox. They were transporting it in a small truck. They placed some ice in a small container of water.

Mother asked, "Why did you put the ice in the water?"

L.B. said, "So it would melt." They continued to play. A full ten minutes later John asked L.B., "Did it melt yet?"

L.B. looked at the ice in the container of

water and said, "Some of it." Mother interjected, "How do you know?" L.B. replied, "It's not so big."

C. L.B.'s initial contact with ice was probably as it was placed in water or some other liquid. From such experiences he probably formulated an expectancy that when ice is placed in water, it gets smaller. This growing smaller has now been associated with melting. His last statement in this record would indicate that "not so big" or growing smaller is his test as to whether the ice has melted. The actions in the record indicate that time is recognized as a factor in melting, i.e., it takes time for the ice to melt; but there is also a suggestion in the record that although the ice becomes smaller as it melts it remains as ice to the child while it melts.

R.—Nov. 28.

A stick was protruding from the ice in the sandbox. Part of it was encased in the ice. L.B. attempted to pull it out without success. He filled a container with water and poured the water over the stick. Then L.B. tried again to pull the stick free from the ice. With all his efforts he was unable to free the stick. L.B. picked up the toy rake and said, "I can break it with this." He chopped at the ice with the rake and rather reflectively said, "Gee, this is hard!" It took a good deal of concentrated effort to finally free the stick.

C. The significant feature of the record for the present purposes seems to be the pouring of the water over the stick. Obviously this was done by the child in an effort to loosen the stick. He realized the ice held the stick in place. From the previous record one might say that the child had a developed expectancy that ice melts when placed in water. In this record he has used this expectancy to direct his activity. His un verbalized thoughts may have been: Pour water over the ice and it will melt, then the stick will be loosened. However, in this case his expectancy did not predict accurately for him, and he had to resort to other means.

R.—Nov. 30.

John and L.B. were playing. L.B. passed the sandbox, looked at it, and said, "It melted. John, it's nearly all water."

C. Obviously the child is referring to the ice. His statement indicates that the ice melted. The items "melted," "ice," and "water" have assumed a relationship within his conceptual framework.

R.—Nov. 30.

John was breaking up what was left of the ice in the sandbox.

John: "I'm gonna make lemon ice."

L.B. began helping John. They smashed the ice and now were placing the small pieces in a basket. Mother asked why the ice was being put in the basket.

L.B.: "It has to warm up first."

Mother: "Why?"

L.B.: "So it'll get juicy so we can make lemon ice."

C. The child has given verbal evidence that he is aware of the role of heat in ice melting. But he has not applied it explicitly in very many of his activities.

R.—Dec. 1.

L.B. was playing with the water in the sandbox. He was playing with some boards which he placed in the water. As he played, he rather pensively said, "Sometimes it's ice, and sometimes it's water."

C. L.B. has recognized the changing conditions in the sandbox. The relationship ice and water is well within his experience. In the previous record he has verbalized on the importance of heat as a factor in ice melting. He has not explicitly stated the role of "coldness" in the water-to-ice formation.

R.—Dec. 6.

L.B. was describing some of the things he did and had planned to do with the water in the sandbox.

L.B.: "I was playing with the water—there wasn't any ice in it . . ."

Dad: "Why wasn't there any ice in the sandbox?"

L.B.: "It melted."

C. The child qualified his description

of the water by saying there wasn't any ice in it. His reply to the father's question was that it had melted. The "warming up" phase of melting has not been integrated into the concept to the point where it is used extensively in replies.

The observations being made by the child are not of the "grand order" of which many feel scientific observations and generalizations ought to be! Rather, the child is observing the very ordinary things around, and from his daily activities he builds a pattern of experiences from which he generalizes. Children who are given many opportunities for true *child-experimentation* show a rather steady progress in the depth and selectivity of the observations and the resultant generalizations which they are able to make. Keep in mind that the roots of an adult's competency are in these "simple" activities in which a child engages!

The natural activity in which preschool children engage and the conditions which surround this activity are *relatively free, relaxed, and unhurried*. The preschooler's activity may be characterized as an interplay. He receives information from adults but this information is rarely given to him with the compulsion that he learn it. He has many experiences which involve an element of discovery. These experiences are not usually pushed at him. The relating he does among the experiences and the information is of a very personal nature. It leads him to generalize about things which are significant and important to him.

Toward What End?

The *end* of any program is to give us the kind of boys and girls we want. In our democracy much emphasis has been given to the fostering of attitudes especially those attitudes we call scientific. Almost any responsible person concerned

with the education of our children is willing to agree that the development of scientific attitudes is a feasible objective of the teaching of science in the elementary school.

However, it is important to remember that young children—preschoolers—are curious. In their growth up to and including the entering of school, preschoolers have used elements of the scientific method and attitude in acquiring a vast store of concepts. The initial school experiences should be approached with this in mind!

Examine the experimentation and demonstration phase of the school science program. Contrast this with the observations a preschool child makes and the natural experimentations he undertakes! Careful scrutiny shows the preschool child seeking *many confirmations* for his rules of experience. He substantiates his rules through many observations and often concocts ingenious experiments as he builds ever-enlarging expectancies of his environment.

The natural experiments undertaken by the preschool child are more akin to true scientific experiments than the experiments and demonstrations often introduced in the school program under the guise of teaching the scientific method. The tendency in many of the "formalized-experiments" is to rely heavily on a single demonstration to prove something. There is an unnatural "push" for a principle or generalization to be drawn from over-limited experience. The medium of play, recognized as an important and significant mode of experience by which the child tests and enlarges his concepts, is to a major extent subverted. Polite recognition is given to the principle of learning by experience; but there is a continual search for means to short circuit the learning process.

Many children tend to grow apathetic during their progress through the elementary school. The initial curiosity with which they enter is lost. How much of this change should normally occur during the course of development and how much is built into them because one way of learning is selected—the way which is supposed to be the least expensive!

A prime function of the modern elementary science program is to encourage, stimulate, and reinforce the natural tendencies of curiosity and experimentation found almost universally among preschool children. Under the proper guidance, these natural tendencies will predominate even when a child has been fed a great deal of mysticism. Content is an essential element in stimulating and keeping alive the insatiable curiosity which motivates the young child.

Not all content is appropriate! An essential element of appropriate content is that it stimulates, it is provocative, it stirs the imagination, and it changes the way the child looks at his world. For example, concepts relating to gravity, the moon, and such a mundane topic as the air, even when partially understood are tremendously provocative and stimulating to young children. In fact, these concepts may bring about a reconstruction in the child's view of his world.¹ The child grasps appropriate content and gives new perspective to many facets of past experience as well as present and future experiences.

Content, continuity, and the step-by-step acquisition of learning elements are all part and parcel of the same problem. If we look wholly for continuity in the content, we are neglecting the central theme of the content, i.e., it has an impact on the behavior, attitude, and the very perceptions of the individual. The individual child should be the prime

focus of the problem of continuity in the science program. Continuity in conceptual development is, in the last analysis, an affair of the individual. This is especially true as we think of the continuity of content in the elementary school.

The problem of continuity arises and may, in fact, be due to the tendency to approach teaching with a compulsive orderliness. There is an insistence on a systematic order and an impatience to move ahead and finish up one thing at a time. Actually the best teaching takes place when the attitude is that a topic may be picked up momentarily—dropped and then picked up again at a later time. In fact, a number of different topics may be under consideration at the same time—the result is a web-like, interlocking growth of concepts in the various areas. This simultaneous consideration of topics allows for a lapse of time to occur so that the ideas in an area may incubate, grow and become a real part of the fabric of the individual. This necessary time lapse is actually in keeping with what we know of the way an individual learns.

If our evaluation procedures and our evaluation instruments were as effective as they could and should be, we would see this multiple topic procedure fostering logical, positive growth in the conceptual framework of the individual. Our methods of evaluation are crude and cumbersome. It is important that concerted effort be devoted toward their improvement, since an important avenue through which we may understand the individual is as he becomes involved with specific curriculum materials. Elementary science materials seem particularly well adapted to this undertaking. It is only as we understand the individual that we can help him achieve better what he is trying to do for himself.

¹ Navarra, *op. cit.*, p. 112.

What About Combination Grades?

Last spring this question was asked along with—Are they really harder to teach? Our whole philosophy of child growth and development is involved in our attitude toward handling combination grades. What can be done to change our point of view from multiplicity of curriculum demands toward recognizing chil-

dren's needs? Can the needs be reconciled?

The resulting replies are typical of teachers' comment everywhere. Some of the problems do not just come from combining two grades but also from large classes and rigid curriculums planned around grade levels instead of children.

Can children benefit from being with other age groups?

The whole premise of sharing, helping, working as a unit for the good of all, can be nurtured within the walls of the combination classroom. The very differences in size, age, and ability which are the complexion of life foster this attitude and philosophy.

Joe, Tim, and Tom were third-grade boys who had been admitted experimentally into a small group of fourth and fifth graders. They were helped to gain a more mature point of view on fighting:

Joe, one of the young boys, said, "You have to fight for your rights."

Tim said, "But the other fellow has rights, too." One of the older boys summed up with, "But if we don't try to manage ourselves so folks can have their rights, there aren't cops enough in the city to do it."

Tim agreed. "Boy, I guess I'd better do some growing. I've sure been learning the hard way."

The commendation of the second graders to the beginners on their achievement was sweeter approbation than ever my praise could be. I cannot describe the beatific expression on the face of Andrew.

the smallest child in the room, as the second graders acclaimed his reading from the blackboard.

What happens when the curriculum is rigidly planned for each grade?

Double grades mean careful double planning, volumes of intelligent seat work and the inevitable papers to correct, consuming precious time which might be spent in giving special help or working on teaching aids.

Social studies projects often need close supervision which is difficult to give in a multiple grade situation.

With all the headaches of double grades, they do have some compensations which facilitate in reaching the child on his own level of ability:

- Reading classes can be grouped without regard for grade placement. A top fourth grader might be reading in a fifth-grade group, or a poor fifth grader may be reading in a slow fourth-grade group.

- Arithmetic and spelling can be arranged in the same manner.

- Poor readers benefit from listening to the stories and information read in other groups.

In three grades, 3A, 4B, 4A, I had five reading groups and three arithmetic lessons, but I learned to group some of the work. The 40 of us had fun together!

Since the third grade did not use a social studies book, we did our project work in science. All of us contributed in some way to a walk-in weather station. With the large group and three grade sections, we learned to help each other so we could have each lesson each day. We never missed reading, spelling, or arithmetic. And, because we had to, we accomplished much because we developed good working habits.

What do we take into account in evaluating results?

We discovered many ways in which we could work together. Although we had curriculum limits to meet in each grade level, we were able to plan and share through language, social studies, science, music, and art. Some of the 2B's increased their progress perceptibly, and the 1A rate of achievement increased, too.

Other children did not fare so well. The larger group meant less attention to them. Nail-biting, showing off, and careless work were some of the warning signals.

There has been a stigma associated with combination rooms felt by teachers, pupils, parents. Problem children, slow-learners, misfits have often been placed in these rooms.

Children need challenge. Let's make combination grades an honor. Place excellent learners with excellent learners. Unit activities would stem from similar interests. Progress charts and grades would be easier recorded with fewer children per grade.

What happens when classroom organization is planned around children—not grades?

Sam entered fourth grade after spending two years in a group of 24 children

6, 7, and 8 years old. Bill completed four years in that unit.

Rarely is the bright child accelerated in this group but neither Sam nor Bill feels guilt at being fast or slow. The average child is a member of the group for three years.

Variety of grouping has been a big factor in meeting the needs of fast, slow, and average children as each year some move on to fourth grade and a group of beginners comes in.

They live together as a family in a grouping similar to that found in community living. The more independent children help the younger ones in many ways. This helps the teacher, too.

In the true sense of the word, *all* grades are combination grades—a combination of the individuals enrolled. Much of my teaching in so-called combination grades was group, or combination teaching. One particular unit stands out in my memory. It was in a little red schoolhouse and we were studying *The Ages of the Earth*. Each of the eight grades did individual research on its own level and the results were comparable to their ages and abilities. What lessons they learned in sharing, cooperating, befriending the weak, and helping others! Democracy in action.

Is a combination grade *harder* than a single one? There is no difference if a teacher recognizes the *needs* of the individuals—be they on 30 levels in one grade or on 30 levels in two or more grades. Yes, I firmly believe that *all* grades are (or *should* be) combination grades—a combination of individuals.

Contributors: Dorothy Bogan, Washington, D.C.; Marjorie Dardenne, Millinocket, Me.; Virginia G. Dinkel, South Bend, Ind.; Frances Timm Dobeski, Michigan City, Ind.; Margaret Grant, Millinocket, Me.; Louise M. Gridley, Yakima, Wash.; Charlotte Jane Kraft, Cincinnati, Ohio; Elizabeth Salters, Winthrop Training School, Rock Hill, S.C.; Betty Gadbury Stephens, Muncie, Ind.; Dorothy F. Weeks, Holly Hill, Fla.

concerns for children are worldwide

. . . In Brazil

By RAYMUNDO MARTAGAO GESTEIRA

IN BRAZIL PROBLEMS OF MATERNITY, CHILDHOOD, and adolescence are of first concern to the Departamento Nacional da Criança (National Children's Department). This is the center, without being the single important agency, of a system of governmental and non-governmental entities. This organ of the Ministry of Health has a general director, who is equal in status to the general director of the Public Health Department in the hierarchy of the Civil Service.

The Departamento Nacional da Criança (D.N.Cr.) offers constant stimulus, general rules, and sometimes financial help to the institutions that work for better physical and mental health, and social conditions for the children of Brazil. It is frequently engaged in research. Its component parts are:

- Division of Organization and Cooperation
- Division of Social Protection
- Service of Education and Divulgence
- Service of Statistics
- Service of Administration
- Training Courses for Nurses: Institute Fernandes Figueira (a hospital for children and maternity cases)

Because of the territorial extension which makes it impossible for the central administration to fully participate in all the details of different areas, the Department has 7 regional offices (Delegacias) covering various sections of Brazil.

The Department operates chiefly by helping private agencies increase their own resources. Instead of becoming a strong competitor the Department cooperates with these organizations. With this purpose studies are being made and problems are being met according to needs, presented situation, and regional peculiarities. Moreover, educational measures have been taken aiming to fight ignorance and to improve the standards of life.

The simplest institutions planned by the D.N.Cr. to care for mothers and children are the Child Welfare Centers (Postos de Puericul-

tura). These have grown in number and importance since the first one began some years ago. They have reduced the infant mortality and level of other adverse phenomena. These units give medical assistance, food—especially milk—to mothers and children, and are often used in the training of personnel.

Real efforts are being made to prepare and train specialized personnel. Hundreds of doctors with specialized courses, social workers, auxiliary personnel for maternity care (midwives), child clinics, and social services are performing various and important functions all over the country.

The Ministry of Labor, through the various Institutos de Previdencia, runs several obstetrical and infant clinics.

The Brazilian Legion of Assistance (Legiao Brasileira de Assistencia) is a national private organization whose objective is also the maternal and infant protection. This entity supports its own services and also cooperates financially with other agencies.

To overcome the problem of infant mortality the teaching of preventive pediatrics and instruction on child care have been emphasized in Brazil among all classes.

Besides the Pediatrics Cathedras in the 10 Brazilian schools of medicine, there is special teaching on "Preventive Pediatrics" in the schools of public health. This is independent of the schools of medicine and is designed to further the technical knowledge of preventive measures.

Recreation Programs for Children

The Department (D.N.Cr.) stimulates recreational programs for children. Through scholarships and grants to Pestalozzi Society of Brazil (Sociedade Pestalozzi do Brasil) it contributes to train specialized personnel for the field of recreation. Over a hundred students from the Pestalozzi's courses are working now in various states.

In collaboration with the Campanha da Criança (a campaign to raise funds for care of children) the Department participates in recreational projects. Several publications on recreation have been issued by the Depart-

Raymundo Martagao Gesteira is General Director of the Children's Federal Department in Brazil.

ment including the result of a research in children's recreation made in 60 institutions in 1947.

The D.N.Cr. is assisted in its purpose by the state departments of children that operate under state funds, financially independent from the central government but using its grants to maintain and pursue the most important programs.

Milk for Children and Mothers

The questions arising from children's nutrition presents, in large cities, a satisfactory aspect.

In the northeast areas, however, where the population's precarious financial situation is of complete poverty, the problem is very serious. The extent of the disaster has been attenuated by the distribution of milk in those areas. UNICEF has greatly contributed to this program.

Brazil will soon overcome such a situation with the functioning of two milk factories. The Government will purchase low price milk to be distributed in those regions periodically beaten by droughts and floods.

Educational problems not related with health concern the Ministry of Education and Culture. In the 23 Brazilian Schools of Social Service, the care and culture of children is also taught.

As a natural result of the joint action of the various private and Governmental agencies in behalf of children, maternal and infant mortality rates are progressively decreasing.

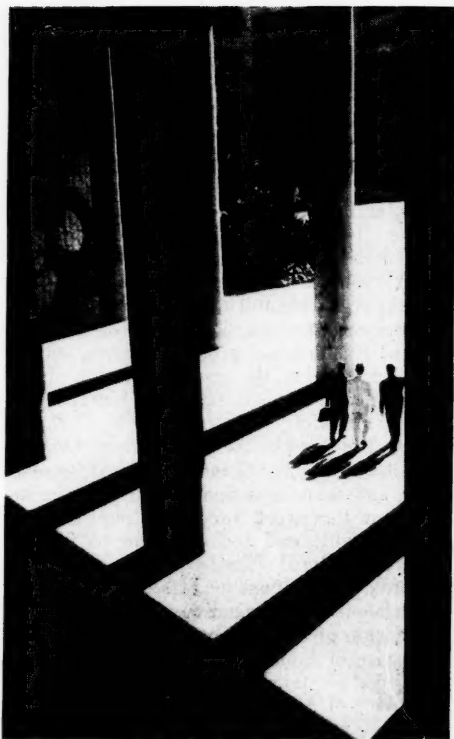
Primary Education¹

In view of the necessity of teaching the people in general to read and write, the Ministry of Education and Public Health has organized a generous program of grants in aid to the states, supported by a special stamp tax known as the "Education and (Public) Health Tax." State and municipal governments, for their part, apply 15 percent of taxes.

As a result the educational movement may be seen to be gathering force throughout the country, stimulated and strengthened by private initiative which is doing much to bring reading and writing within the reach of the poorest families.

In 1949 there were about 50,000 school units operating in Brazil with a teaching staff of 100,000 and attendance rated at more than three million children.

¹ Information secured from **Modern Brazil**, Immigration and Colonization Council, 1949.



Entrance to Ministry of Health and Education Building, Rio de Janeiro.

The year 1947 saw the birth of a widespread movement of popular education entitled, "Adults' Educational Campaign" and aiming at the organization of 10,000 complementary classes for illiterate young people and grownups in all the cities, towns, and villages of Brazil. In less than 12 months this goal was already surpassed, the 10,185 classes then maintained with federal aid meeting with the most encouraging results. A further 3000 classes and more were soon being run by various associations and even by individual initiative.

In addition it should be noted that about 40,000 persons each teach two or three pupils at home.

It is estimated that more than half a million people profit by this form of education, for among them the Department of Education alone has already distributed 585,000 copies of an elementary reading book specially designed for this purpose.

NEWS and REVIEWS

News HERE and THERE . . .

By FRANCES HAMILTON

New ACE Branch

Nebo Association for Childhood Education, Utah

New Life Members

ACEI is proud to welcome two new Life Members:

Pauline Hilliard, Gainesville, Florida
Elizabeth A. Kempton, Waukesha, Wisconsin

ACEI Headquarters Building Fund

"Step by Step toward the ACEI Center" is the title of a recently inaugurated monthly newsletter. Its purpose is to keep members, readers of CHILDHOOD EDUCATION, and other friends informed of progress toward the goal—a permanent headquarters for ACEI.

Readers who wish information are invited to send for copies of #1 and #2 newsletters. They are interesting reading. Send a stamped self-addressed envelope to ACEI, 1200 - 15th St., N.W., Washington 5, D. C. You will receive the newsletters by return mail.

As a reader of CHILDHOOD EDUCATION you will wish to be informed and perhaps to participate in the establishment of a functional ACEI Center in Washington, D. C. It is an important undertaking.

Recent contributions to the ACEI Headquarters Building Fund bring the total to \$21,783.41.

Opportunities to Teach and Study

Each year, as visitors from other countries visit ACEI Headquarters and as others return from teaching and studying abroad, the lasting value of the educational exchange programs impresses us more.

Two booklets have been published by the U. S. Government describing available exchange positions and scholarships. *The Policy Statements of the Board of Foreign Scholarships*, published by the International Educational Exchange Service of the Department of State, describes in detail all scholarships available under the Fulbright Act, and how to apply for them. *Exchange Teaching Opportunities and Summer Seminars Under the In-*

ternational Education Exchange Program, published by the U. S. Department of Health, Education, and Welfare, provides the same information regarding positions under the Fulbright Act and the Smith-Mundt Act.

Film Reviewed

He Who Dares to Teach, a film reviewed here at Headquarters, records the story of California's Parent-Participation Program, a class sponsored by the Bureau of Adult Education.

The film concerns a young couple who, much distressed by the apparent naughtiness of their 4 year old, enroll her in the nursery class. Through observation of many children, participation in the nursery school, and discussion with other parents led by competent teachers, they gain a new understanding of young children. A happier, more satisfying home life for their family results.

The film story is straightforward and without pretense. The fact that the actors are not professionals adds to its charm and the feeling of sincerity.

Since the purpose of the film is to describe a participation program as an effective way of adult education and to show how one operates, *He Who Dares to Teach* could be shown profitably to preschool parent groups, teachers, administrators, church leaders, students, and to community groups unacquainted with such programs.

More complete information about the film may be obtained from Hal Moulin and Associates, 1037 N. La Brea Ave., Hollywood 38, Calif.

ACEI and ASCD to Co-sponsor a Play

The Association for Childhood Education International and the Association for Supervision and Curriculum Development are to co-sponsor a play for use in discussions with teachers and parents regarding modern education. The play is to be produced by the American Theatre Wing, and is being written by Nora Stirling, author of the well-known mental health plays for parents. The play is expected to be available early in 1956. Further information regarding it may be obtained from the American Theatre Wing, 351 W. 48th St., New York 36, N. Y.

"Music for Children's Living"

Children are natural musicians. You witness that everyday when you see them humming, whistling, or just tapping on a table top. Music is a part of their living. With this in mind the latest membership service bulletin of ACEI, *Music for Children's Living*, has been prepared by educators known for their successful work with children. The chapters include suggestions and discussions which will aid teachers, parents, church school, play school, and recreation directors concerned with providing experiences in music for children between the ages of 2 and 12. 48 pages: 75c. Order from: ACEI, 1200 - 15th St., N.W., Washington, D. C.

Report of 1956 Nominating Committee

After careful consideration the ACEI Nominating Committee presents the following candidates for election at the 1956 Conference:

For Vice-President Representing Primary Education: Gwen Hart, Teacher, Public Schools, Tulsa, Okla.

For Vice-President Representing Intermediate Education: Marian Jenkins, Supervisor of Elementary Education, Public Schools, Los Angeles County, Calif.

For Secretary-Treasurer: Anna Lee Shipley, Supervisor of Elementary Education, Public Schools, Chattanooga, Tenn.

Visitors to ACEI Headquarters

A group of senior students from Mills College of Education in New York visited ACEI Headquarters in October. They have been ACE members since their freshman year. As a part of their senior year experiences the students from Mills College spent several days in Washington becoming acquainted with educational resources in the capital city.

ACE Branch Delegates

Presidents of ACE branches will receive, the middle of December, credentials for official delegates to the ACEI Study Conference. It is especially important that delegates be selected promptly and their Conference registrations mailed directly to ACEI Headquarters.

Education for Children Below Six

Educators interested in children of elementary-school age will want the new publication of the National Council of State Consultants in Elementary Education, which has been pre-

pared in cooperation with members of the elementary staff of the Office of Education, Department of Health, Education, and Welfare. *Education for Children Below Six* is a revision of a 1948 publication of a similar title. The new bulletin is one of a series titled *Planning for America's Children*. Included is discussion of policies and practices, programs, housing plans, advance planning, and sources of information. The bulletin is available from the National Council of State Consultants in Elementary Education, c/o Elsa Schneider, 1711 Mass. Ave., N.W., Washington, D. C., at \$1 per copy.

Report of NANE Nominating Committee of 1955

The National Association for Nursery Education has elected the following officers to serve for terms of two years beginning January 1, 1956.

President: Theodora Reeve, State Dept. of Education, Albany, N. Y.

First Vice-President: Katherine H. Read, Oregon State College, Corvallis, Oregon

Second Vice-President: Catherine Landreth, University of Calif., Berkeley

Secretary-Treasurer: Barbara Fischer, Stephens College, Columbia, Missouri, and Aladine Schumacher, Southside Community House, St. Louis, Mo.

Conference to Honor John E. Anderson

To recognize 30 years of activity in the Institute of Child Welfare at the University of Minnesota, the University is sponsoring a conference on "The Concept of Development." The conference will take place December 8-10, 1955. For information write to Dr. Dale B. Harris, Director, Institute of Child Welfare, University of Minnesota, Minneapolis 14.

White House Conference

At the White House Conference on Education held in Washington, D. C., November 28 to December 1, the Association for Childhood Education International was officially represented by Merle Gray, ACEI President. Frances Hamilton, Executive Secretary, who served as an advisor to a White House subcommittee throughout the year was also a participant. The more than 2,000 Conference participants representing civic groups and educational organizations brought together the thinking of millions of citizens focusing on the problems facing the United States on elementary and secondary education.

Books for Children . . .

Editor, CHRISTINE B. GILBERT

It is hoped that underneath each Christmas tree this year a group of books will be found, for what could bring more lasting enjoyment and pleasure than some of the fine new books which are appearing for children. There are several new volumes of poetry from which to choose.

A DILLER, A DOLLAR. *Compiled by Lillian Morrison. Illustrated by Marj Bauernschmidt. New York: Crowell, 432 4th Ave., 1955. Pp. 150. \$2.50.*

DANCING IN THE MOON. *Written and illustrated by Fritz Eichenberg. New York: Harcourt, Brace, 383 Madison Ave., 1955. Unp. \$2.50.*

WELCOME CHRISTMAS! *Selected by Anne Thaxter Eaton. Illustrated by Valenti Angelo. New York: Viking, 18 E. 48th St., 1955. Pp. 128. \$2.50.*

IMAGINATION'S OTHER PLACE. *Compiled by Helen Plotz. Illustrated by Clare Leighton. New York: Crowell, 432 4th Ave., 1955. Pp. 200. \$3.50.*

MOUSE CHORUS. *By Elizabeth Coatsworth. Illustrated by Genevieve Vaughan-Jackson. New York: Pantheon, 333 6th Ave., 1955. Unp. \$2.*

A Diller, A Dollar, Rhymes and Sayings for The Ten O'Clock Scholar, is Lillian Morrison's new collection of poems and verses about school. Most of them are extremely humorous and deal with school complaints, taunts, proverbs, parodies, jokes, jingles, games, and rhymes, all characteristic of children's attitude toward school. These rhymes, which have been passed on by generations of school children, make a book for all ages to enjoy and especially for school children to share with their chums. Ages: 8 to 14.

Dancing in The Moon, though a thin book, is a lively introduction to numbers for young children. Fritz Eichenberg, the distinguished artist, has designed a lovely picture book about the numbers 1 to 20. "4 pandas resting on verandas" and "14 mice skating on ice" will prove irresistible to children. Ages: 3 to 6.

For as many years as I can remember, Anne Eaton has been remembering her friends at Christmas with a well-chosen and beautifully printed Christmas poem. To these poems she has added other favorites, making a collection which is distinguished and appropriate for the Christmas season. *Welcome Christmas!* is illustrated by Valenti Angelo and is designed as a companion book to *The Animals' Christmas*, Miss Eaton's earlier collection. *Welcome Christmas!* brings together some of the old, well-known poems and carols, some of the new; but all, new or old, were chosen because they have in them the inner spirit of the season, because they suggest not only a happy but a blessed Christmas.

Imagination's Other Place will be a delight to librarians and teachers as well as to young people, for it includes a fine collection of poems about science and mathematics. "Poets have always been interested in the world about them—in scientific discoveries and the men who made them. Sometimes, because of their special sensitivities, they have even anticipated the scientists and have written about such subjects as evolution and space-time with great insight and foresight." Included are poems on astronomy, geography, physics, chemistry, biology, and medicine. To those who think that the scientist's world is not the poet's world, this collection will be a revelation. *Ages: 12 up.*

In *Mouse Chorus* Elizabeth Coatsworth has written a small collection of songs and poems about mice—"happy mice and hungry mice, mice out in the cold or cosy in the house, mice that sing and mice that dance." The illustrations by the English artist, Genevieve Vaughan-Jackson, are particularly enchanting. *Ages: 4 to 8.*

PLAY WITH ME. *Written and illustrated by Marie Hall Ets. New York: Viking, 18 E. 48th St., 1955. Pp. 31. \$2.50.* This is a perfect book for children three to six years old, for while it is deceptively simple to an adult, it tells a charming and true story to children. One summer morning an excited little girl tried to persuade all the meadow animals to come play with her, but to no avail, until she sat down and quietly waited, and then they all came to her. In style of writing it is much like *In The Forest* (my favorite of Mrs. Ets' books), but the illustrations show a new technique—they are very childlike in soft colors. Be sure to notice the

little girl's eyes as the animal creatures approach to play with her. Her expression is one of hope, awe, satisfaction, all at the same time. *Ages: 3 to 6.*

WHEN IS TOMORROW? *By Nancy Dingman Watson. Illustrated by Aldren A. Watson. New York: Knopf, 501 Madison Ave., 1955. Unp. \$2.* A young child has no sense of time as adults very well know when they try to answer the oft repeated questions of "Is it today?" or "Is it tomorrow yet?" Using this theme, Nancy Watson has woven the story of a child's summer activities at Squirrel Island, and the things they are going to do "tomorrow." Much to Linda's surprise, the things planned for tomorrow always seem to be done "today." The illustrations in color and in black and white make a lively picture book for 3 to 6 year olds.

ALL THE MICE CAME. *Written and illustrated by Robert Kraus. New York: Harper, 49 E. 33rd St., 1955. Unp. \$1.75.* Mice are a popular subject in children's literature and Robert Kraus has taken advantage of this interest to do an interesting picture book tell-

ing how all of the mice prepared to come to a party, but when they arrived, much to their horror they found that a cat was their host. *Ages: 3 to 6.*


THE TRAVELING MUSICIANS. *A Story by the Brothers Grimm. Illustrated by Hans Fischer. New York: Harcourt, Brace, 383 Madison Ave., 1955. Unp. \$3.* One of Grimms' favorite fairy tales has been illustrated in a gay and colorful manner by Hans Fischer. This is one of the best of the Grimm fairy tales to use with young children, and it is a pleasure to have it in such a handsome volume. *Ages: 4 to 8.*

MIKKO'S FORTUNE. *By Leo Kingman. Illustrated by Arnold Edwin Bare. New York: Farrar, Straus & Cudahy, 101 5th Ave., 1955. Pp. 46. \$2.75.* This is the story of a brave Finnish boy, Mikko, and his struggle to get a cow for his mother. The story is reminiscent of many folk tales, for Mikko sets off on his adventure carrying with him the three articles his father had given him: a book, a lantern, and a hand-knitted scarf. All these play an important part in the story. This is a good introduction to Finland and a real "adventure" story for young children. *Ages: 4 to 9.*

BACK AND FORTH. *Written and illustrated by Dorothy Grider. Philadelphia: Lippincott, E. Washington Sq., 1955. Unp. \$2.* This is an interesting presentation of economics in picture-book form. The New Hope-Lambertville Bridge in Pennsylvania is the setting for this story, which tells about the movement of traffic back and forth across the bridge. Food, materials, and people go across the bridge into the city; and food, materials and supplies also cross the bridge to the country. *Ages: 4 to 8.*

MONKEYS. *By Herbert S. Zim. Illustrated by Cardell D. Christensen. New York: William Morrow, 425 4th Ave., 1955. Pp. 60. \$2.* Herbert Zim's latest book on monkeys is an important addition to our books on mammals for young children. It is especially welcome since it is simply written and copiously illustrated. *Ages: 8 to 12.*

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Books for Adults . . .

Editors: Laura Zirbes
Cecile Swales

THE DIRECTION OF HUMAN DEVELOPMENT.

By M. F. Ashley Montague. New York: Harper, 49 E. 33rd St., 1955. Pp. 404. \$5. Through research and experimental evidence, fascinating case histories, and direct quotations from authorities in the various areas of science concerned with the study of human development, Dr. Montague has presented to parents and teachers the magnitude of their role as educators. Through well-documented evidence the serious reader is confronted with the challenging and significant principle that the child is innately co-operative and that only through love can he become a socially functional human being. ". . . Education begins at birth . . . and must be regarded as a continuous process in which everyone, parents and teachers participate together. . . . To produce loving human beings should be the primary purpose of education. Reading, writing and arithmetic are but skills, techniques, means, which should be designed to assist the living human being to realize to the optimum his potentialities

for getting the most out of life by putting the most into it."

Throughout this extremely interesting and informative book the reader is led to conclude with the author that "When men learn to understand how dependent they are upon one another, that they are interdependent beings in a great cooperative enterprise, that it is their nature to be affectionate, cooperative persons, when they understand that being anything else is to be in conflict with themselves and to create divisiveness within society, mankind will be a great deal happier and healthier than it is today."—Reviewed by KATHLEEN MUSTAINE, O.S.U., Columbus.

THE BEGINNING TEACHER. By Wilbur A. Yauch, Martin H. Bartels, and Emmet Morris. New York: Holt, 383 Madison Ave., 1955. Pp. 339. \$3.50.

This book addressed to the graduating senior in teacher education is unique in its authorship. One author is head of a department of education, another is a director of teacher placement, and the other is a practicing school principal. In addition to the authors' collective public school experience in teaching and administration, many referrals are made to *A National Survey of the Beginning Teachers*. The complete report is contained in the Appendix.

(Continued on page 196)



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Books for Adults

(Continued from page 195)

Part Two, "Getting Ready for the Job," is especially well-written and relevant for anyone considering teaching as a profession.

Some portions of Part Three, "Learning about Your New Job," overlap—particularly the considerations of the teacher's human relationships. Perhaps the organization of the chapters could have been changed so that the various phases of a teacher's human relationships could have been treated as a whole.

The authors are obviously frank throughout the book. They present the facts available, and depict both the good and bad points of the teaching profession.—Reviewed by MARGARET VESEY, O.S.U. Columbus.

BEHAVIOR AND MISBEHAVIOR and A CHILD DEVELOPMENT POINT OF VIEW. By James L. Hymes, Jr. New York: Prentice-Hall, 70 Fifth Ave., 1955. Pp. 140 and 145. \$3 each.

Behavior and Misbehavior offers suggestions geared to actual conditions found in most schools. The suggestions take into account large classes, individual differences in children, and other responsibilities every teacher meets.

This book is an excellent guide in helping the teacher to thoughtful, effective action good for children. Techniques for use with stable children and those requiring remedial treatment are presented. The author says "only one rule is constant: You must determine the cause, and your action must be consistent with the cause." He helps you learn how to approach a behavior problem and suggests various actions tailored to the child and his trouble.

A Child Development Point of View focuses on the facts and concepts of child development that will help a teacher to better understanding as he copes with day-to-day problems. In defining the field of study in child development, Dr. Hymes says: "It borrows a little from psychiatry, a little from sociology. It takes some ideas from pediatrics, and some from nutrition. Anthropology chips in some of its findings. A great many disciplines—group work, religious education, industrial relations—all give something to Child Development." He studies the totality of a child's life and brings to light generalizations that have been uncovered in child development that can

strengthen one's sensitivity and sharpen one's goals in teaching boys and girls.

The positive approach taken by the author in both of these books is stimulating and pertinent reading. They would be timely and helpful guides in the hands of parents. The language is simple and direct, written by an authority in the field of child development reflecting much up-to-date thinking and research in that field.—Reviewed by MARY WILSBURG, University School, O.S.U., Columbus.

THE FIVES AND SIXES GO TO SCHOOL.

By Emma Dickson Sheehy. New York: Holt, 333 Madison Ave., 1954. Pp. 372. \$5. Interestingly detailed description of actual classroom situations, illustrated with clear-cut pictures of children in action, make the reading of this book a rewarding experience. Unusual but well-deserved emphasis is given to the classroom teacher and his important role in providing good education for young children. Resourcefulness and ingenuity, creative imagination and originality, sensitiveness and understanding are stressed as essential attributes of teachers who are to deal with "the stubborn realities of children's current experiences" and utilize effectively everyday happenings and events as rich learning situations.

The book is divided into three parts although so noted only in the Table of Contents. Chapters 1-4 deal with the physical set up and the daily program for young children; Chapters 5-12 describe the kinds of experiences that contribute to successful living and learning for 5's and 6's; the two final chapters are a more general discussion of records and reports and parent-teacher relationships.

Suggested Readings at the close of each chapter are well selected and afford excellent material for study and discussion.—C.S.

GUIDANCE SERVICES IN ELEMENTARY

SCHOOLS. By Harold Wright Bernard, C. Evan James, and Franklin R. Zeran. New York: Chartwell House, 280 Madison Ave., 1954. Pp. 403. \$5.75. This book is dedicated to teachers on the job as well as to those in training. The guidance approach is refreshingly stated—interest in learning to know children as individuals and, in turn, in helping each child to contribute according to the level of his ability and to work with materials at a level where he can succeed. Although special testing and guidance techniques are

adequately handled, the contribution of this book is found in the stress on the importance of sound mental health as the basic factor in education.

Many concrete and practical suggestions are offered to implement the theories of good mental health in actual classroom practice. Each chapter is also enriched with a brief, but selected, annotated bibliography.—Reviewed by JEANNE ORR, O.S.U., Columbus.

HEALTH SUPERVISION OF YOUNG CHILDREN. *Committees on Child Health of the American Public Health Association. New York 19: APHA, 1790 Broadway, 1955. Pp. 179. \$2.* Changes in accepted methods and practices of child health care have created a need for a comprehensive up-to-date guide for workers in this field. *Health Supervision of Young Children* has been prepared to meet that need.

This volume integrates the physical and psychological aspects of health supervision and brings together new information about the health needs of children not easily available elsewhere.

This book will be of interest to professional personnel, administrators, and community leaders responsible for the health of children. It is excellent reference material for teachers interested in becoming better acquainted with the present trend toward increased teacher participation in health education.—Reviewed by MARGUERITE ANDERSON, Nurse, University School, O.S.U., Columbus.

LANGUAGE ARTS FOR TODAY'S CHILDREN. *New York: Appleton-Century-Crofts, 35 W. 32nd St., 1954. Pp. 431.*

\$3.75. The second volume by the Commission on the English Curriculum of the National Council of Teachers of English appears to be principally directed toward the inservice elementary school teacher, and is well suited as a general overview of the language arts area for college methods classes. The scholarly language student may feel that the book is too general, uses too many teaching illustrations, and lacks an adequate theoretical, abstract coverage of the subject.

Part one develops the language and child development background needed for the building of an effective language curriculum. Part two treats separately four aspects of language—listening, speaking, reading, and writing.

(Continued on page 198)

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Books for Adults

(Continued from page 197)

Part three presents an integrated picture of language experiences in classroom living. Part four deals with pupil appraisal techniques in language arts teaching, the evaluation of language arts programs, and contains an interesting discussion of home and school cooperation in fostering language growth. This arrangement facilitates isolated attention to any section of the text and also provides a satisfactory organization for the entire book.

Admirable features of the volume are the provision of "real" teaching illustrations of the major ideas expounded, excellent photographs which clearly illustrate activity concepts, specific references to language materials and activities for children, and readable style.—Reviewed by GEORGE E. DICKSON, O.S.U., Columbus.

TEACHING SPELLING. By Gertrude Hildreth. New York: Henry Holt, 383 Madison Ave., 1955. Pp. 346. \$3.95. This is a thorough treatise on the teaching of spelling as an important basic tool in American schools. The

author discusses the idiosyncrasies and irregularities of the English language which make the teaching and learning of spelling so difficult. Following this is a brief survey of the principles of learning as they apply to spelling and word usage. The functional approach through the language-arts program is emphasized throughout the book.

Several chapters are devoted to instructional techniques on three levels—readiness and primary; intermediate and upper elementary; and high school and college years. Suggestions are made for effective word study and provision for individualized instruction. There is a chapter on spelling tests. Research in basic vocabulary studies is summarized, and references to research in spelling over the last 50 years are at the end of each chapter.—Reviewed by NELLE MORRIS, University School, O.S.U., Columbus.

UNIT TEACHING IN THE ELEMENTARY SCHOOL. By Lavone A. Hanna, Gladys L. Potter, and Neva Hagaman. New York: Rinehart, 232 Madison Ave., 1955. Pp. 592.

\$5.50. The purpose—to state the philosophy underlying unit teaching and offer practical suggestions—has been achieved in an admirable way throughout the book.

The style of writing is direct, easy to read, and interesting. The content is the outgrowth of much real teaching experience as well as of research and study.

The opening section which discusses social change, psychological basis for unit selection and development, democratic values, and organization of learning experiences is excellent.

The discussion of teaching the unit is complete and well organized. It is rich with lively illustrations, pictorial and verbal, from a wide range of units both as to topic and age level. Particularly good is the discussion of dramatic play and dramatization as a natural and ongoing part of each unit.

The unit, as here presented, is a complete and well-rounded learning experience with emphasis on research skills, problem solving, aesthetic experiences, construction activities, dramatic play and dramatization, and the continual functional guided use of basic skills. There are excellent discussions on the development of concepts and generalizations, the development of democratic social behavior, and on evaluation in terms of changes in behavior.—Reviewed by BLANCHE KENT VERBECK, Otterbein College, Westerville, Ohio.

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Bulletins and Pamphlets

Editor, PATSY MONTAGUE

BULLETIN BOARDS FOR TEACHING. By Charles H. Dent and Ernest F. Tiemann. Austin, Texas: Visual Instruction Bureau, Div. of Extension, Univ. of Texas, 1955.

Pp. 38. Price not given. A constant need for classroom teachers is information on suggestions and techniques helpful in planning and preparing bulletin board displays. Such information will be found in this well-prepared bulletin which is Number 2 of the *Bridges for Ideas* series issued by the University of Texas.

The bulletin will appeal to teachers who want brief concrete information and specific directions on the know-how of developing effective bulletin boards that enrich learning. The material is presented in simple graphic style which even the elementary-school children understand. The list of sources of materials and the well selected bibliography are well worth the cost of the bulletin and deserve special mention.—Reviewed by CORA PAUL BOMAR, State Dept. of Public Instruction, Raleigh, N. C.

TRAINING CURRICULUM LEADERS FOR COOPERATIVE RESEARCH. By Passow, Miles, Corey, Draper. New York: Bureau of Publications, Teachers College, Columbia Univ., 1955. Pp. 158. Price not given.

This pamphlet describes a series of conferences designed to increase the ability of a selected group of curriculum leaders to conduct cooperative research. It is not specific enough to be a guide but the experiences of those who participated in the conferences might be of value to those who believe that a good way to improve the curriculum is to base change on cooperative research.—P.M.

EVALUATING AND REPORTING PUPIL PROGRESS. By John W. M. Rothney. Washington, D. C.: Dept. of Classroom Teachers, American Educational Research Association of the NEA, 1201 16th St., 1955. Pp. 33. 25¢. This publication is one of a series of pamphlets on "what research says to the teacher." In the light of recent research some of the current practices and problems involved in evaluating and reporting pupil progress are clearly shown. The pam-

phlet does not describe the one best way to evaluate and report a pupil's progress. It reveals the assets and limitations of commonly used techniques and warns against the exclusive use of any one of these. Emphasis is placed on continuous evaluation as an integral part of the instructional program.—P.M.

SELECTED FILMS FOR WORLD UNDERSTANDING. By Wendell W. Williams. Bloomington, Ind.: Indiana Univ., 1955.

Pp. 88. \$1.50. Teachers, parents, and lay organizations would find this list of almost 400 films most helpful in selecting material for programs and study groups interested in developing a better understanding of America's role in the world today. The bulletin is organized for effective use. (The first three parts list the films in categories according to subject covered, geographic classification, and alphabetically by title with detail information for each film.) Producers and Distributors, Part IV, gives necessary data for securing any film described in the first three parts of the bulletin.—Reviewed by CORA PAUL BOMAR, State Dept. of Public Instruction, Raleigh, N. C.

THE RABBIT WITH A HIGH I.Q. By Ethel Nicola and Diane Witte. New York: Bureau of Publications, T.C., Columbia University, 1955. Pp. 30. 40¢. Herbert, a rabbit with a high I.Q., causes his parents and teachers much concern because he learns faster than other rabbits. Conventional techniques for solving Herbert's problem fail miserably.

After much rhyme and reasoning:
"He wasn't set apart from the rest
As being 'different' or being the best,
But given a place where he could give
And learn from those with whom he'd live."
—P.M.

TRENDS IN THE PRODUCTION OF CURRICULUM GUIDES. A Survey of Courses of Study Published in 1951 through 1953. By Eleanor Merritt and Henry Harap. Nashville, Tenn.: Division of Surveys and Field Services, George Peabody College, 1955. Pp. 43. 50¢. This monograph clearly describes the practices and trends in curriculum development as reflected through 796 courses of study from 185 school systems. Cooperative efforts on the part of administrators and teachers in developing curriculum guides seem definitely to be the trends in this area.—P.M.

Over the Editor's Desk

Presenting Why and How for Nur- sery Schools

The Association for Nursery Education of Southern California presented the values of nursery school experience to the California Senate Interim Committee on Social Welfare. Here are excerpts and a summary of the material:

"What is their learning program (of the nursery school)? Briefly, it is the beginning of human relations—how to get on peacefully and happily with contemporaries—the problem the world is struggling with today . . ."

Consideration for the other person is developed as the child learns to take turns.

The individual's responsibility as a person is a daily experience in the care of wraps.

Doing his own thinking is encouraged by choosing what materials, what activities, and which companions.

Respect for property as well as people is fostered in care of materials and equipment.

An attitude of giving, instead of only getting, is built by sharing knowledge and skills with others.

Obedience to group rules is part of daily routines.

Responsibility for individual's own behavior develops as he works through problems with other children.

"The embryonic world of the nursery school fosters the qualities of a good society. For this work there needs to be a teacher especially trained in nursery school education. The daily give and take of group living goes on under the leadership of a person who knows small children, their natural responses to people and things . . ."

"This teacher is also competent to talk with parents—about some of the reasons for children's behavior; about setting the limits for children which give them the security and freedom to be themselves . . ."

Among Letters We Like to Get

Mrs. Harold Benjamin, Nashville, Tennessee, made us happy with this letter.

"I visited Miss Hawkins training school for kindergarten and nursery school teachers when I was in Japan recently. It is a very good little school, part of a Canadian Episcopal Mission. I noticed files of CHILDHOOD EDUCATION which were being treasured by the

library and used year after year by the students. Libraries in Japan are not so well furnished as those in this country. Miss Hawkins told me she thought your magazine was one of the best in her field, but she had not been able to afford the subscription the past two or three years. So I am supplying the subscription for her."

ACEI Goes Everywhere

Provision for ACEI to travel far and wide has been made by ACEI Branches and Members through the Expansion Service Fund.

This Fund, established in 1944, is made up of voluntary contributions from individuals and groups. The *Branch Exchange* carries an accounting which is always good reading since the "how come" is listed along with the donation.

Expenditure of the fund is authorized by the ACEI Executive Board. They have always felt that distribution of publications to the far corners of the earth is a worthy purpose.

What ACEI stands for traveled to 26 countries last year—through CHILDHOOD EDUCATION, bulletins, and filmstrips.

Next Month "Understanding the Individual" is the topic for the January issue. Laura Hooper has prepared an editorial emphasizing that even among a normal group of children there can be many differences.

"Seeing Their Differences in Perspective" is an introduction by Ralph H. Ojemann which ties together four articles covering physical, intellectual, social, and emotional differences. These have been prepared by Doris D. Klaussen, Ruth Strang, Evelyn Adlerblum, and Darrel Mase.

"Emotional First Aid for the Young Child" by Lois B. Murphy will provide thought for adults working with children of all ages.

The second section will have eight pages on art for children by Myron Cunningham.

"Faith Enough for Both" by Helen Buckley will be the article in the section on "The Teacher." A report from another part of the world in the section "Concerns for Children Are Worldwide."

News and Reviews will bring news notes, reviews of books for adults and for children, reviews of current magazine articles.

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